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**ASSESSING THE IMPACTS OF WORK-RELATED APPLICATIONS OF
IMPROVISATION TRAINING ON PSYCHOLOGICAL
SAFETY IN TEAMS**

**A Research Project
Presented to the Faculty of
The Graziadio Business School
Pepperdine University**

**In Partial Fulfillment
of the Requirements for the Degree
Master of Science
In
Organization Development**

**by
Marne Maykowskyj Nordean**

August 2020

This research project, completed by

MARNE MAYKOWSKYI NORDEAN

under the guidance of the Faculty Committee and approved by its members, has been submitted to and accepted by the faculty of The Graziadio Business School in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE
IN ORGANIZATION DEVELOPMENT

Date: August 2020

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Abstract

This paper discusses improvisational training (IMPT) and psychological safety and seeks to find if the former impacts the latter. For this study, improvisation has four main tenets: ensemble / co-creation, ‘yes, and’ / accept and heighten, authenticity / celebrating failure, and listening and communication skills. Psychological safety is defined as the shared belief held by members of a team that the team is safe for interpersonal risk-taking and a sense of confidence that the team will not embarrass, reject or punish someone for speaking up. This confidence stems from mutual respect and trust among team members. It is described as a team climate where members feel comfortable being themselves. This study proposes that IMPT impacts psychological safety in teams in a positive way. All participants suggested IMPT training was present in their psychologically safe teams, recognized all four tenets of improv, and impacted the psychological safety of the team.

Keywords: improvisational training, psychological safety, yes, and, accept and heighten, authenticity, celebrating failure, listening, communication

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Chapter 1: Introduction

The vice president of marketing steels herself as she pushes through the doors to the meeting room. She thinks of the last meeting where her teammate laughed out loud and rolled his eyes when she presented an idea she had been working on. Her heart starts to race as she imagines zipping up her impenetrable walls to protect herself. She promises herself she will just get through this meeting, not say a word, and not let anyone get to her. The less she says, the faster the meeting will be over and the sooner she can leave. In another meeting room down the hall, a project manager arrives at his meeting 10 minutes early, eager to dig into a new idea with his team. He cannot wait to hear what his teammates have been working on since they last met. The goal of today's meeting is to brainstorm new ideas and he gets a rush of energy as he thinks of the flow his team reaches in their brainstorm sessions. The laughter comes easily in this team while they are creating new ideas in an effortless fashion.

Both of these scenarios were described in detail by the participants of the present study. The amount of energy present when speaking about both was significant. Participants described walking into work prepared for battle and shutting down as a result. They shared just getting through every day as a struggle. Conversely, they described the delight they felt in other teams where laughter was easy, and ideas flowed freely. The difference in the two scenarios is the presence, and lack, of psychological safety.

Psychological Safety is critical to team success (Edmondson, 2019). In order for teams to be successful, the members must be able to feel safe enough to question, innovate, and feel confident to be themselves. Google's two-year long Project Aristotle

found that the number one factor in successful teams is psychological safety (Duhigg, 2016). The two teams above show how two environments so physically close, led by the same executive team, can be drastically different. This study hopes to discover how organizations can set the scene for the second team and ensure environments like the first do not exist.

Edmondson (1999) defines psychological safety as a “shared belief held by members of a team that the team is safe for interpersonal risk-taking” and “a sense of confidence that the team will not embarrass, reject or punish someone for speaking up. This confidence stems from mutual respect and trust among team members” (p. 354). It is described as a team climate where members feel comfortable being themselves.

The present study explores one element that can potentially help provide an environment for psychological safety: improvisation training, or IMPT. Improvisation, or improv, is often thought of strictly as comedy and theater; however, its tenets actually align closely with critical business communication and success (Leonard & Yorton, 2015). Leonard (2019) describes improv as ‘practice for being a better human being,’ ‘yoga for social skills,’ and ‘loud group mindfulness.’ Edmondson (2003) points to “practice fields” (p. 18) as a way to create psychological safety. Pilots do not fly airplanes without practice. Surgeons do not operate on people without practice. IMPT is a practice; practice for interaction and interpersonal skills (Leonard & Yorton, 2015). Teams are interaction and interpersonal skills. It is reasonable that these skills would help enhance the conditions that lead to psychological safety.

Improv, while seemingly chaotic and unstructured is actually the opposite (Gibb, 2004; Huffaker, 2005; Moshavi, 2001; Vera & Crossan, 2004). There is a universal

structure, both explicit and implicit. The structure of improv are the rules and the tenets. The rules are the explicit structure of an exercise or game; often this is explained to the audience at the beginning of a scene. The tenets are the foundation for all improv exercises and games, the implicit structure. They are the beliefs that every troupe adheres to in creating a scene. Most important for the present study is the idea that every actor, or participant, is coming to each creation with the same mindset: the tenets (Moshavi, 2001). The main tenets used in this paper are inspired by Leonard and Yorton (2015). They are:

1. Ensemble and co-creation. Ensemble is moving the focus from the individual to the group. It is letting go of the need to be right, the need for control, and rewarding candor. Co-creation is using the audience, fellow players and team members to create something better than would ever be created alone.
2. Say “yes, and.” “Yes, and” is the acceptance and heightening of anything a team member has said. It is meeting the team members where they are and accepting what ideas are being expressed by them. It is playing the scene one is in.
3. Authenticity and acceptance of failure. Releasing the fear of failure allows team members to be themselves - to be authentic. When the fear of failure is relinquished, team members are free to collaborate and innovate. “The biggest threat to creativity is fear, especially the fear of failure. By deflating the negative power of failure, you erode fear and allow creativity to flourish” (Leonard & Yorton, 2015, p. 15).
4. Listening. Listening is crucial to successful improvisation and all communication. Before anything can be accepted and heightened, one must

listen to their scene partners and team members. Improvisational listening goes beyond active listening to recognizing every word from your scene partner, or team member, as a gift.

Dan Moshavi (2001) introduced improv for management instructors for use in their classrooms. Improv exercises were thought to benefit managerial skill sets in team building, developing trust, reducing risk/fear of failure, enhancing creativity and innovation, and interpersonal communications. Using Moshavi's (2001) instructions, it is logical that the tenets of improv correlate to the main tenets of psychological safety. If a person has had IMPT where they learn to follow these rules of improvisation, will they be able to take that learning into their teams? Will team members be able to "yes, and" in their working environment? Will the "yes, anding" create interpersonal trust and mutual respect? Will the feelings of ensemble translate into feelings of confidence that members won't be rejected?

Purpose

The purpose of the present study is to discover the impacts of IMPT on perceptions of psychological safety on individual members of teams.

Study Setting

Due to the Covid-19 pandemic of 2020, the interview portion of this study was conducted virtually via Zoom, an online meeting application. The sample was one of convenience of 11 people who had completed some IMPT and worked on teams. The sample consisted of participants from the age ranges of 25 - 35 through 56 and older, in various industries, across the United States.

Significance of Study

At the same time as today's teams are becoming increasingly complex, people are demanding better work environments. The makeup of teams is evolving dramatically with multiple generations working together and an increasingly global makeup. Teams are built around projects, programs, and social causes. They can be specific to a single department and function, can be cross-functional within a company, or comprised of people from varied industries working together (Gibb Dyer, 2013; Minahan, 2014).

Working under the threat of ridicule or chastisement is not only unsatisfactory, it activates the brain in the same way it would a perceived physical threat. This inhibits learning and certainly inhibits creativity and innovation. The presence of psychological safety reduces these threats and allows people to flourish (Edmondson, 2019). Learning new ways, such as IMPT, could help create psychologically safe environments.

Organization of the Study

This chapter outlined the background and purpose of the study, provided a description of the study setting, and identified the significance of the study. Chapter 2 reviews the literature relevant to both improvisation training and psychological safety and the literature that I used to connect the two. Chapter 3 outlines the methods to be used in the study. Chapter 4 reports and analyzes the data collection and Chapter 5 presents the conclusions.

Chapter 2: Literature Review

The present study explores the impact of participating in IMPT on individual perceptions of psychological safety. First, the existing literature on IMPT will be reviewed, next the existing literature on psychological safety will be reviewed, and finally followed by the literature suggesting how IMPT may support psychological safety. The chapter concludes with a framework that shows how IMPT may be related to psychological safety.

IMPT focuses on ensemble / co-creation, “yes, and” / accept and heighten, authenticity and rewarding failure, and listening (Leonard & Yorton, 2015). Psychological safety is defined by Edmondson (1999) as “a sense of confidence that the team will not embarrass, reject or punish someone for speaking up. This confidence stems from mutual respect and trust among team members” and “it describes a team climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves” (p. 354). The definitions complement each other, but can one impact the other?

In exploring IMPT and its effect on psychological safety, significant research on both can be found, but published work examining the correlation is lacking. This study addresses the question, “How does IMPT impact the perception of Psychological Safety on teams?”

Improvisation Training (IMPT)

The literature reviewed here will first describe IMPT, then demonstrate how IMPT impacts business environments, classrooms, and training. Next, the four main tenets of IMPT will be reviewed. It will be shown how IMPT has been researched as the

precursor to many critical business characteristics, including agility, collaboration, and innovation.

There are several noted approaches to improv training and work (Corsun et al., 2006; Felsman, et al., 2018, Ferdin, 2000; Kirsten & du Preez, 2010) all highlighting the characteristics of improvisation training. It is referred to as the following in the literature: Improv, ITG: Improvisational Theater Games, Applied Improvisation, and ABT: Arts-Based Training. For the purposes of this study, Improv Training or IMPT will be used to represent all.

Leonard (2019) describes improv as ‘loud group mindfulness’ and says it requires participants to be ‘fiercely present.’

Crossan (1998) emphasizes the use of improv workshops facilitated by experts to teach and experience the improvisation experience. Vera and Crossan (2005) explain that because improvisation uses skills humans have extensive experience with, such as facial expressions, tone of voice, words, and posture, the lessons learned in improvisation are transferable to life and business. Improvisational training is actually practice for real life. As Leonard (2019) puts it, ‘improv is practice for being better human beings.’

The Structure

Improvisation is often thought of as a comedy presentation, or theatrical experience, that is created randomly. In actuality, it is a much more complex phenomenon. It is theater without a script. The formula of traditional theater is to learn a single script and rehearse it intensely. Improv preparation is actually transposed as the script is created in the moment, and it is the framework of the scene that has been rehearsed extensively. Improvisation uses a specific, constructed structure, or framework,

for an actor to work within while creating something entirely new in the moment (Vera & Crossan, 2004). By focusing on the process of creating, and letting go, of a rehearsed and memorized script, innovation abounds. Even when using the same framework, with the same people, on the same stage, a new creation happens with every experience.

Improvisation actors create as an ensemble. They rely on making something better together than they could alone. This group creation is realized by being completely present in the moment, trusting that the team members will accept what is offered and heighten it, and actively listening to scene partners throughout the exercise (Boesen et. al., 2009; Brousseau, 2019; Crossan, 1997; Leonard & Yorton, 2015; Moshavi, 2001; Vera & Crossan, 2005).

The rules of each improvisational exercise are the external structure. These are often shared with the audience at the beginning of a scene or exercise. The principles, or tenets, of improvisation are the internal structure which are understood by the players, but not obvious to the audience (Bermant, 2013; Crossan, 1998; Crossan & Sorrenti, 1995; Moshavi, 2001; Vera & Crossan, 2004, 2005). Vera and Crossan (2004) reinforce that improv is not chaotic but structured: “we argue against negative preconceptions that position improvisation as an antithesis to strategic planning and as a process that needs to be abolished from organizational life” (p. 744). Leonard and Yorton (2015) emphasize the creativity of releasing the script; they argue that when concentrating single mindedly on the final product, the creation would be lost. Vera and Crossan (2004) emphasize that “improvisational actors are encouraged to focus on the process and suspend judgment of the outcome” (p. 737). “Spontaneity, like luck, favors the well-prepared” (Bermant, 2013, p. 1).

To exemplify these two elements of the structure, an improvisational exercise will be explored. The exercise will be ‘parts of a whole.’ In this exercise, the players (the ensemble) ask the audience for a type of animal. An audience member offers ‘elephant.’ Silently, the players move around each other creating parts of an elephant with their bodies, or potentially as other parts of the scene, until they are all satisfied. The explicit structure of the exercise are the rules: 1. the audience member offers a type of animal, 2. the exercise is played out in silence, 3. the players choose their own position, 4. there is no leader, and 5. the scene is over when everyone is satisfied. The implicit structure of this exercise are the tenets of improvisation that are the foundation for all improvisation exercises.

The Tenets of Improv

Leonard and Yorton (2015) list the following tenets of improvisation:

1. Yes, and: affirm and heighten.
2. Ensemble
3. Co-Creation
4. Authenticity
5. Failure
6. Follow the Follower
7. Listening

These tenets allow an ensemble to make something out of nothing, or an elephant out of five people. In a business team, this can be seen in the quick generation of ideas, effective communication, teammates looking for the best idea and not ‘their’ idea, and the creation of ensembles that rise to every occasion. It can be seen in the creation of open dialogue

with employees, with customers, and with the breakdown of organizational silos that threaten collaborative success. “What improvisation does, in its most simple form, is to take the focus off ourselves and allow us to dial down our personal judgment” (Leonard & Yorton, 2015, p. 22). The focus is removed from the individual and placed on the team and what the team can create. For the purpose of this paper, the elements will be combined into the following:

1. Ensemble / co-creation
2. Yes, And / accept and heighten
3. Authenticity / the celebration of failure
4. Listening / communication skills

IMPT has shown, through the use of these tenets, improved performance in a business and classroom setting in creativity and innovation, learning, cultivating leadership, fostering teamwork, building trust among team members, helping to alleviate fear, increasing communication skills, increasing mindfulness, increasing agility, and reducing social anxiety (Crossan, 1998; Kirsten & du Preez, 2010; Leonard & Yorton, 2015; Vera & Crossan, 2004, 2005).

Ensemble and Co-creation.

The first tenet of improvisation is ensemble. Ensemble is the letting go of competition, hierarchy, and the need to be the star in the room. It is believing that the team is more powerful than the individual. It is trusting that together the team will create more than the single person alone would. Leonard and Yorton (2015) describe it as “creating an environment where the group’s goals trump the individual’s, where there’s enough credit for all, and where candor is rewarded, not punished” (p. 14). Ensemble is

created for the singular intent of a group of people working as one to accomplish its purpose. Leonard and Yorton (2015) explain that to make any team an ensemble they must be in the moment, be both a giver and taker, and surrender the need to be right.

Co-creation in improvisation is the communication between the audience and the ensemble of actors on the stage as well as the movement of the scene by the audience reaction (Leonard & Yorton, 2015). Improvisation is not a passive experience. The actors ask for input, audience members shout ideas, and the audience reacts to a story line impacting its direction. In the same way, co-creation can occur at all levels of an organization, between companies and their customers, between ensembles within the same organization, and between teammates. Leonard and Yorton (2015) describe how to foster co-creation by finding the idea, not your idea, ceding control, eradicating fear, and asking questions. The resulting co-creation's success depends on acknowledging everyone's contributions (Leonard & Yorton, 2015; Moshavi, 2001)

Huffaker and West (2005) describe the idea of ensemble as “willingness to change and/or let go of one's agenda [is] a key ingredient that enables use of information gained through listening, the willingness to change (and thereby to be changed)” (p. 856). It has been shown that IMPT where an ensemble is created and reinforced, leads to an increase in the feeling of teamwork in the workplace and classroom (Bermant, 2013; Crossan, 1997; Felsman, Seifert, & Himle, 2018; Huffaker & West, 2005; Leonard & Yorton, 2015; Ratten & Hodge, 2016; Vera & Crossan, 2004).

Huffaker and West (2005) began business course classes with improvisation exercises in order to create a learning environment, create a space conducive to risk taking, and to create a new space for class discussion. They were surprised to find their

students eager to join the exercises and shed the worries they had on their minds walking into the classroom. An ensemble was created after the students practiced improv together. They were able to experience each other in the improv exercises in a new way and carried it into the classroom. Huffaker and West (2005) also observed co-creation occur with visiting creative professionals. They observed their business students from vastly different backgrounds, when learning from creative professionals, surprised at their own creativity and, “contributing equally to creating something with a creative professional. The class was not only energized by the experience but also indeed felt a connection to, rather than a separation from, panelists and their experience” (Huffaker & West, 2005, p. 860). They noticed that their improvisation exercises increased engagement and interaction within the class each week and that the students had discussions that were authentic, inquisitive, and seemed to be better because of the relationships fostered with each other and the visiting panelists. Seven months after the class ended, the group was gathered and interviewed about their experience where the anecdotal observations were validated (Huffaker & West, 2005).

Crossan (1997) enrolled in an improvisation class to explore the idea of improvisation as a metaphor for business. Crossan (1997) found many key skills learned by practicing improvisation. One that stood out was the teamwork necessary to work cohesively. Crossan (1997) noted that teamwork included trust amongst the ensemble, a common goal, a shared responsibility, a common vocabulary, and the ability both to lead and to follow. Crossan (1997) quotes Halpern et al. (1994):

When a team of improvisers pays close attention to each other, hearing and remembering everything, and respecting all that they hear, a group mind forms.

The goal of this phenomenon is to connect the information created out of group ideas - and it's easily capable of brilliance. (p. 85)

Crossan (1998) concluded a typical improvisation exercise can develop six key areas in the practice of management: interpreting the environment, crafting strategy, cultivating leadership, fostering teamwork, developing individual skills, and assessing organizational culture. Crossan (1998) theorized how, with expert improviser facilitation, practicing can be applied to business skills and emphasizes the potential for increasing innovation.

Crossan and Vera (2004) suggest that improvisational exercises are transferable to organizations. Many improvisation exercises involve groups building stories together. Some are one word at a time, others two words, others phrases that are allowed to continue until another participant says 'freeze' and steps in. These exercises allow participants to let go of their preconceived ideas and are forced to let go of control of the situation altogether. This training encourages leaders to learn to let go of the sublimity of their own ideas and learn to build on others' and know when to lead and when to allow others to lead (Crossan, 1997, 1998).

Bermant (2013) parallels practicing improvisation and domains in applied psychology, namely: body awareness and mindfulness, positive psychology interventions, and person-centered psychotherapy. Bermant (2013) states that both increase personal awareness, interpersonal attentiveness, and trust among members of the ensemble. Bermant (2013) says of the ensemble, "to experience this in any context is a stimulus to enact it in others. The contexts will differ markedly, but the cognitive-affective matrix of individuals and ensembles can become equally wholesome" (p. 3).

Yes, And or Affirm and Heighten

The most well-known tenant of improvisation is ‘yes, and.’ ‘Yes, and’ is not a simple acceptance of others’ offers, but an ‘affirming and building’ and ‘exploring and heightening’ of these offers rather than ‘blocking’ which is the dismissal and refusal of others’ offers (Crossan, 1997, 1998; Leonard & Yorton, 2015; Vera & Crossan, 2004). Bermant (2013) calls it “the unambiguous and complete support of performing partners for each other” (p. 3). Vera and Crossan (2004) describe good actors as making “the most of whatever is in front of them and moving the action forward” (p. 740).

Leonard and Yorton (2015) say, “with ‘yes, and’, you don’t have to act on every idea, but you do have to give every idea a chance to be acted on” (p. 13). Further, Leonard and Yorton (2015) say, “when people are building and supporting each other’s ideas quickly, they tend to filter and judge less, and when you take off filters at the early stages of a brainstorm session, you allow ideas to go to new places, and you discover new connections that conventional wisdom doesn’t account for” (p. 31). Crossan (1998) describes the players on the stage in such an exercise:

They must rely on themselves and each other. But there is an intangible quality of trust and kinship to the culture of the stage. The trust and kinship are the grease that enables individuals to put themselves at risk, operate as a team, and take different leads at different times. Living up to the principles of improvisation, such as “yes-anding” helps to build the culture of trust (p. 597).

Moshavi (2001) points out that “students who are rescued come to see that trust is given as a gift and are more likely to reciprocate in the future” (p. 445) while Leonard and Yorton (2015) build trust and allow the missing trust to be felt in a ‘yes, and’ exercise. In

this exercise, partners start with a ‘no’ response, move to a ‘yes, but’ response, and end with a ‘Yes, and’ response. In Leonard’s (2019) work, it was found that ‘yes, and’ did not go far enough; that the exercise should end with a ‘thank you, because’ round to really feel the appreciation and instill trust (2019).

Second City Works (SCW) is the branch of Chicago’s famed Second City Theater that teaches improvisation to businesses for professional development. Leonard and Yorton describe an instance when SCW worked with the leadership team of a large retailer to reestablish trust that had been lost in a restructuring. They ran specific exercises that asked each of the 50 executives to take turns stepping into the center of their circle and strike a pose. Next, another person stepped in tapped the first on the shoulder and created a new pose. The first person said, ‘thank you’ and returned to the circle. This exercise was used to “show them viscerally and experientially what trust is and how it feels when it is missing” (p. 136). Each member had to take turns putting themselves on the spot while supporting their fellow ‘players’ (Leonard & Yorton, 2015).

Authenticity and Celebration of Failure

Tenet celebrates not only being authentically one’s self, but also allows challenges to be made; to the status quo and to teammates. In improvisation, failure is not simply tolerated, it is celebrated. It is recognized as the font of innovation. If troupe members are not aiming for failure, they will never get near the flame of creation, (Leonard & Yorton, 2015).

Rock (2009) describes the brain’s negative response to recognized unsafe situations as ‘hot spots.’ These hot spots occur when the limbic system is aroused. It causes one to look out for even more danger which can cause defeatist thinking. As the

brain moves to self-protection mode, confidence retreats (Rock, 2009). This can prevent a person from speaking up in a meeting. It can halt a leader who wants to try something new for fear of appearing silly. It can literally stop new ideas from forming in the brain. Fear can even prevent a person from trying improvisation for the first time. Feeling free to challenge and fail big removes much of the fear involved in improvisation and business.

Leonard and Yorton (2015) quote Dr. Mark Pfeffer, a psychotherapist and director of the Panic/Anxiety Recovery Center in Chicago, who explains, “Every time you learn to be unafraid, your brain changes. [Improvisation is] the quickest way to get to the neural pathway change because it puts [people] in a situation where they are facing their fears” (p. 22).

Although some people might be intimidated by IMPT and fear the psychological risks, Moshavi (2001) points out that improvisation exercises are often less severe than the thought of speaking out in a normal business class and the more the exercises are practiced, the less fear is felt. There are many reasons for this such as the instruction to focus on the structure of the exercise and being present in the experience which does not allow room for the fear of being wrong or thinking about the next interaction that is about to happen. Additionally, the exercises move along at a pace that does not allow for second guessing or self-judgment and over time students become more invested in participating than refraining from participation, as choosing not to participate becomes the wrong behavior as students come to realize that they are all responsible for the success of the product (Moshavi, 2001).

Vera and Crossan (2005) suggest that a norm of agreement and tolerance for mistakes, a culture of experimentation, and a culture of valuing the process and not just the product are among the most critical factors. One participant was quoted:

In this new project, these guys had the freedom to work and to make their own mistakes so that they learn from them... without being so close-minded or difficult so that they don't want to come and ask for advice or help. It's a balance, a very tricky balance, giving that comfortable feeling that it's ok to mess up - we will fix it, and we are going to learn from it. (Vera & Crossan, 2005, p. 215)

Therapists in Israel after improvisation training reported feeling less afraid of mistakes as there were no right or wrong answers. One reported,

I think the course opens a place for mistakes, which is something that you need to be ready for and not to be scared of. And I was always very, very scared of making a mistake... Because once it sounded to me like a catastrophe. It's not that I'm killing anyone here. And I really made mistakes... and it's okay. Let's see what we can do from here, nothing is a big catastrophe... I just need to give myself more permission to dare more. (Romanelli et al., 2017, p. 16)

In a study of 266 adolescent students in Detroit, 43% of the 147 responses no longer screened positive for social anxiety after a single fall term (10 weeks) of improvisation exercises as part of The Improv Project (Felsman, Seifert, & Himle, 2018). Bermant (2013) states about improvisation's ability to lessen the fear of failure, "it is the realization that my only obligation on stage is to my scene partner, whose only obligation is to me...a net of support is constructed from the openness, trust, and acceptance expressed within the ensemble. Individual vulnerability creates collective strength (p. 3).

Crossan and Hurst (2006) describe organizational cultures that value 'efficiency over effectiveness' and 'exploitation over exploration' tend to have low levels of experimentation and do not accept mistakes. In their research on mediators that make improvisational training successful in business, they found that the opposite must be true. Organizations must value effectiveness over efficiency and exploration over exploitation. Crossan (1997) states, "a culture of friendship exists in improvisation, as opposed to the professionalism in most businesses. A culture of friendship doesn't mean that individuals need to socialize with one another outside work. It means that people care about one another and try to support each other's efforts, which in turn cultivates a high degree of trust... and think about setting up the next person for success." (p. 38)

Corsun et al. (2006) studied managers and their perceptual shortcuts, biases, and missed details and found that improvisation training can create awareness of these shortcuts and reduce or eliminate problems associated with them. Typically, learners do not believe they take these shortcuts even when they are pointed out which is why lectures and classroom methods do not tend to be successful. Corsun et al. (2006) found the managers in their study to be more flexible and open to recognizing 'accurate information-processing styles' after they had been made aware of their biases and taught ways to be mindful of them through improvisation training. They found when the sample was involved in an improvisation exercise, they had to be completely present and respond spontaneously, which allowed their biases to be shown and therefore recognized consciously. They could not consider, or curate, their responses.

Listening and Communication Skills

Communication is critical in today's world, especially in the success of teams. Communication requires listening skills, empathy, and verbal agility. Scinto (2014) points out that improv skills are critical as it is imperative to understand when it is appropriate to speak and when to listen, and improv players must be able to be present in the moment, listen carefully, and contribute freely.

Boesen, et al. (2009) incorporated improvisational training into their 1st-year pharmacy curriculum. They included 12 hours of exercises into the 16-week Interviewing and Counseling Skills course for 90 first year students. Their goal was to increase the students' ability to listen, observe, and respond with their patients. At the end of the course, they found through standardized patient examinations, course evaluations, and reflective journals that students training had a positive effect on their overall communication skills, specifically their ability to read their patients nonverbal cues. As a result, Boesen et al. (2009) emphatically encouraged other colleges and schools of pharmacy to implement similar coursework. They also found their students to be more comfortable speaking in front of a group by being present in the moment. They describe improvisation training's positive effect on communications skills:

actors rely heavily on their fellow actors expanding on each other's ideas as they create a scene on stage. They listen carefully while observing body language, paying attention not only to the words, but also to the emotional context and subtle inflections. They must do all this while focusing completely on the moment without anticipating or directing the action and dialog that unfold. Because of improvisational training exercises intrinsically focus on the skills of listening,

observing, and responding, these exercises can be useful in other training settings.

(Boesen et al., 2009, p. 1)

Similarly, Hoffman, Utley, and Ciccarone (2008) introduced weekly improvisation exercises to their 1st-year medical students and found communication skills and confidence in patient interactions increased and it taught them to “be more human” (p. 538). One student noted the training “helped with active listening and appreciating other people’s train of thought” (Hoffman, Utley, & Ciccarone, 2008, p. 538).

Listening is an often missed yet critical part of communication. Listening to learn is very different from listening while waiting for a chance to respond (Leonard & Yorton, 2015). The very act of improvising requires deep listening without worrying about what just happened or what might happen next (Crossan, 1997). Improvisation training includes exercises where each player must listen to the end of their partner’s sentence and start their sentence with the last words spoken. There is no opportunity to think about one’s next line until the partner has finished. This trains players to let go of their own thoughts until they are sure their partner is finished speaking which translates into their ability to listen to whole thoughts and their interpersonal communications in life (Moshavi, 2001)

Scinto (2014) quotes Rebecca Waber, who leads a team of consultants at Innosight in Boston, “What you need to do in improvisation is listen closely to every word a scene partner is saying. Everything is moving so fast; you may have missed the most interesting thing. The audience may have heard it, and if you missed it you haven’t really driven the scene forward, you don’t know what to react to. When you’re in a meeting with a client, you need to not only hear but deeply listen to everything” (para. 5).

In a three-month study of working therapists graduate training in Israel, researchers found that following improvisation training courses, therapists “experienced higher levels of therapeutic presence in terms of use of intuition, awareness in the here-and-now and mindfulness” (Romanelli, Tishby, & Moran, 2017, p. 18). 41 students took three courses of improvisation. 17 of them were interviewed four months after completion about their experience in the classes and how it was reflected in their practice following the classes. The therapists reported that they were less distracted by intellectual thoughts and thoughts about what ‘should’ be said versus experiencing their clients in the immediate present. Among the descriptions that stood out from the interviews were increased intuitional thinking, improved sense of spontaneity and flexibility, improved awareness of emotions, increased sense of relaxation and congruence in therapy, less fear of making mistakes, increased confidence in therapy, and more presence in therapy (Romanelli et al., 2017).

Improvisation has been described as ‘loud group mindfulness’ and requires its players to be ‘fiercely present’ (Leonard, 2019). While often thought of as a comedic theatrical presentation, improvisation is a structured model that can be taught in order to increase skills in other arenas, such as improved innovation, learning, leadership skills, communication skills, mindfulness, and agility in the business office and classroom (Crossan, 1998, Kirsten & du Preez, 2010; Leonard & Yorton, 2015; Vera & Crossan, 2004, 2005). This thesis will further the research on improvisation training’s effects on teams, specifically psychological safety.

Psychological Safety

The over two yearlong project at Google, called Project Aristotle, looked at over 180 existing teams in the search to find how to build the best teams. Looking at personality types, skills and backgrounds, whether teammates socialized outside of work or not, and even people's hobbies produced no discernible patterns. Even teams that looked similar on paper had different levels of effectiveness. Successful teams that had particular norms, clear goals, and a culture of dependability recognized these were important but most critical to a team's success was found to be psychological safety. A Google team member described their successful team leader as, "direct and straightforward, which creates a safe space for you to take risks" (Duhigg, 2016, para. 32). Google researchers found their sought-after pattern in teams who felt comfortable and safe simply by being themselves (Duhigg, 2016).

Psychological safety is described by Schein (1965) as necessary for change. In order for an organization to change, the individuals must have psychological safety (Schein, 1965). Schein (1993) further wrote that individuals can move beyond self-protection and focus on collective goals when psychological safety is present.

The majority of the research on psychological safety has studied the phenomenon as a precursor to specific team characteristics; exploring what effects it has on team success, innovation, or learning ability, or researching how it affects behaviors like reporting errors and team learning (Farndale, 2017; Kahn, 1990; Paulsen, 2017). The vast majority of studies have shown an increase in all of these factors when psychological safety is present in the teams (Edmondson & Lei, 2014). Not as much research has been done on what leads to psychological safety. The literature reviewed here will describe

psychological safety, outline some proposed precursors from literature, and provide one case study that shows the steps a medical office took to implement psychological safety.

According to Edmondson (1999), psychological safety is not just a warm feeling amongst teammates. It is also not a ‘safe space’ where nothing challenging is spoken. Psychological safety is defined as “a sense of confidence that the team will not embarrass, reject or punish someone for speaking up. This confidence stems from mutual respect and trust among team members” and “it describes a team climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves” (Edmondson, 1999, p. 354), where mistakes are caught and learned from, people feel free to innovate, and organizations thrive.

For the purposes of this study, Edmondson’s (1999) definition was used as the three Principles of Psychological Safety:

1. The Confidence that the Team Won’t Embarrass Reject or Punish for Speaking Up.
2. Interpersonal Trust and Mutual Respect.
3. Letting go of Thoughts of Negative Consequences of Expressing Ideas and Allowing to Be Oneself. (p. 354)

In her book, Edmondson (2019) describes a lost voiced idea as a lost innovation for a company. Every time a person does not feel safe enough to speak up in a meeting, not only is their voice lost to them personally, but the company has lost the potential idea that could have resulted from their discussion.

How to Create Psychological Safety

Edmondson (2003) proposes a model of precursors to psychological safety in work teams and delineates the difference between interpersonal trust and psychological safety. While both interpersonal trust and psychological safety both involve a perception of risk and vulnerability, the three factors that are different about interpersonal trust and psychological safety are the object of focus, the time aspect, and the level of analysis. While interpersonal trust is the act of giving someone else the benefit of the doubt and deciding whether or not to place one's vulnerability in the hands of someone else, psychological safety is about one's own safety and whether or not the group will give one the benefit of the doubt, especially in situations when speaking up or making a mistake. The second difference is that interpersonal trust considers a lengthy time span of interaction, where decisions in the present are weighed against the impact they will have over the length of a relationship. Conversely, psychological safety involves the split-second decision, sometimes not even consciously made, that the danger of the present moment outweighs any potential harm or danger that may happen in the future. The thought of speaking up and being chastised or embarrassed in the moment may feel more dangerous than the threat of the potential danger being raised. Finally, interpersonal trust is a fundamentally dyadic phenomenon, where psychological safety is a group level analysis. It is the property of the collective. When surveying samples, Edmondson (2003) found repeatedly that members tended to hold similar perceptions about their groups. Edmondson (2003) says this is most likely due to groups having the same manager, developing their beliefs from the same group experiences, whether they be personal or vicarious. A particular difference between the two is that when interpersonal trust is

present, the members of the dyad tend to monitor their behavior less, while groups with psychological safety present exhibit learning behavior (Edmondson, 2003).

Edmondson (2003) proposes five factors that most likely increase the chance of psychological safety in teams: leader behavior, trusting and respectful interpersonal relationships, practice fields, organizational context support, and emergent group dynamics. In particular to the present study, two potential factors: leader behavior and practice fields, will be discussed in more detail.

Edmondson (2002) points out that psychological safety often varies from group to group, even in the same organization. Edmondson (2002) emphasizes that it is imperative for managers of all levels to focus on the work units, or teams, and that the CEO and upper management level do not have the same effect on groups with whom they are not in face to face contact. It can be one person in the room who destroys psychological safety and trying to make it an organization wide construct from the top likely will not be a successful endeavor (Edmondson & Woolley, 2003). Edmondson (2003) speculates the following three aspects of leader (leaders of all levels) behavior will promote psychological safety: being available and approachable, explicitly inviting input and feedback, and modeling openness and fallibility. “By making themselves available and approachable, leaders may reduce perceived barriers that prohibit discussion. In contrast, if leaders assume authoritative stances or act in punitive ways, team members are likely to feel that their opinions are not welcomed or valued (Edmondson, 1996, p. 356). Asking team members for feedback of their own work and behavior shows the team that their opinions matter and that it is safe to ask for their own feedback. When leaders are defensive or discourage input, team members are less likely to offer their thoughts for

fear of negative consequences. Barriers due to the differences in status can be reduced when the leader is showing fallibility or vulnerability while also encouraging team members to share their own mistakes (Edmondson, 2003). Psychological safety can vary greatly between groups in the same organization. Where one group can feel safe for members to be authentic, the group in the next room might be afraid to speak up for fear of chastisement (Edmondson, 2002). Edmondson (2003) shows, “leader behavior sets a salient example for how to behave, and beliefs about how leaders will use their power is likely to affect psychological safety” (p. 15).

Practice fields (Senge, 1990) are specifically created opportunities for teams to practice their work instead of learning in actual on the job situations. Senge (1990) points out sports teams, musical ensembles, and cockpit crews as spending time practicing before actually competing, performing, or flying an airplane. Edmondson (2003) reiterates that managers do not typically get to practice but must perform on the job at the expense of their own learning and the psychological safety of their teams. Not only does this show the team that what they are doing is critical, but that learning is important. Edmondson (2003) describes two contrasting medical teams who used dry runs for complicated surgeries. In one example, the entire team was present, the team ran through the technical aspects of the operation, discussed how their communication would work, the lead surgeon described the new technologies, and relayed how mistakes are inevitable and that it was important to speak up if anything seemed out of place. In the contrasting team, the only member of the practice team at the actual operation was the surgeon. Edmondson (2003) found the engagement of the practice teams significantly correlated with the team psychological safety.

Edmondson (2019) describes how to ‘set the stage’ for psychological safety. In particular, Edmondson (2019) points out how to respond productively with the following:

1. Expressions of appreciation,
2. Destigmatizing failure,
3. Sanctioning clear violations
4. Substituting candor for silence and engagement for fear

The idea or question is not what is important, but the reception of this idea or question is very important. The courage it took to speak up must be appreciated immediately. The most important goal must be to keep the team member speaking up.

Edmondson (2019) points out the more fear is associated with failure; the less people will risk failure. If there is a risk of failure, there is no reach for success or innovation. Team members must feel not only safe but encouraged to reach for new ideas and to question the status quo. In order to create this feeling of safety, leaders and teammates must destigmatize failure. Instead of punishing or ridiculing these reaches, leaders and teams must celebrate them. Edmondson (2019) outlines the best response to a failure is with concern to the future impact. Is this a failure that was a mistake and won't happen again? Was it a flagrant dismissal of the company's values? Was it a reach that could be a new process that could change the efficiency of the whole organization? All three are very different kinds of failures and should be treated individually.

While it might seem that sanctioning clear violations might lead to the breakdown of psychological safety or instill fear into an organization, Edmondson (2019) shows that it increases psychological safety. If a team member repeatedly acts sloppily, harmfully, or even dangerously, the organization must know that this behavior will not be tolerated. It

sets the stage for what behavior is and what is not allowed. Having strong structure allows people to flourish within the known boundaries. A quality that should be practiced by leaders of every level, including team members with no direct reports, is being candid and engaged. The more people let go of silence and fear, to the level that protects their safety, the more their teammates will feel comfortable to respond in kind.

Case Study for Creating Psychological Safety

Cave et al. (2016) shows an example of an organization putting factors in place in order to create an environment of psychological safety. A new tool has been developed to create psychological safety in medical school, among medical professionals, and between doctors and patients. Their observations over 10 years of clinical and teaching experience taught them that most groups come together for certain purposes and create assumptions and implicit norms which lead to discord, misunderstandings, perceived disrespect, and resentment. Their tool is an acronym called CENTRE, which stands for: confidentiality, equal airtime, non-judgmental listening, timeliness, right to pass, and engaged. Their hope was in using the mnemonic to explicitly state these norms, groups will be able to have a set course for existing members and new members to the group alike. The first and highest guideline is confidentiality. This means anyone outside of the meeting can only speak to their own experience. If they need to discuss something with another participant, they must receive permission first. The second guideline is equal airtime. Each member is to be cognizant of their participation, but the leader makes sure everyone on the team has an equal chance to speak. The third guideline is non-judgmental (respectful) listening. This asks each member to believe that anyone speaking is sharing their genuine experience. Each member must speak in 'I' statements and take turns. Members are

expected to keep their phones off and give each speaker their full attention. The fourth guideline is timeliness. Meetings should start and end on time and members should be respectful of each other's time. The right to pass is the fifth guideline which allows anyone the choice to not speak. The final guideline is engaged. Each member is expected to be as present in the meeting as possible (Cave et al., 2016).

After putting CENTRE into place, Cave et al. (2016) conducted an inhouse survey of 17 leaders who had each been involved in between two and 46 group sessions about the efficacy of the guidelines on a 10-point scale and the aggregate ranking was 9.1. Their studying the effectiveness of training with CENTRE suggests that bringing specific norms, that are intended to increase psychological safety and inclusiveness, into the open and making them explicit avoids the misunderstandings and discontent of many different assumptions (Cave et al., 2016).

There is not an abundance of literature on how to create psychological safety; however, based on Edmondson's (2003, 2019) work, some promising propositions are group leaders' behavior (i.e., being trained to be approachable and available), to explicitly invite input and feedback, and model openness and fallibility. Additionally, it is suggested having practice fields in order to allow team members to practice not only their positions but communications skills would increase members belief in their team's support of each other and allow them the comfort to be themselves in actual on the job situations (Edmondson, 2003, 2019; Senge, 1990).

How Improvisational Training May Affect Psychological Safety in Teams

du Preez and Kirsten (2010) found that IMPT can add value to teams' capacity to be innovative. Among other team characteristics, they measured participative safety. Du

Preez and Kirsten (2010) use the term ‘participative safety’ from Anderson and West (1998) and West (1990) to describe psychological safety. Their definition is a psychological construct that supports an atmosphere within a work group which is perceived as interpersonally non-threatening and thereby motivates and reinforces involvement in decision making. Non-judgmental, non-threatening, trusting, and supportive of the individual offering contributions and ideas and are characterized by socio-emotional cohesiveness, support for innovation, vision, and task orientation. Du Preez and Kirsten (2010) surveyed the sample before an improvisation training intervention and eight weeks post intervention. The most positively impacted factor was participative safety. Their conclusion is that because improvisation creates an atmosphere of acceptance and encouragement to participate it makes the team psychologically safe. Unfortunately, the manager of the team was not able to attend the intervention which the authors feel impacted the outcomes of the remaining factors.

Moshavi (2001) suggests his outlined improvisational training can benefit the managerial skill set in the following ways:

- Interpersonal communications
- Problem solving
- Team building
- Developing trust
- Enhancing creativity and innovation
- Reducing risk/fear of failure
- Adaptability

For the purpose of this paper, the benefits will be combined into the following:

- Team building
- Developing trust
- Reducing risk / fear of failure / enhancing creativity and innovation
- Interpersonal communications

As mentioned above, Edmondson (2003) identifies five proposed precursors to psychological safety:

- Leader behavior,
- Trusting and respectful interpersonal relationships,
- Practice fields,
- Emergent group dynamics.

Edmondson's (2003) leadership behaviors described above will also be used in the framework. The three behaviors leaders can practice that can promote psychological safety include:

- Being available and approachable
- Explicitly inviting input and feedback
- Modeling openness and fallibility

Table 1 shows how the tenets of improvisation (Leonard & Yorton, 2015), Moshavi's (2001) improvisation training instructions, Edmondson's (2003) proposed antecedents of psychological safety, Edmondson's (2019) 'setting the stage,' and Edmondson's (2003) leader characteristics can result in psychological safety. Table 2 extrapolates the characteristics of improvisational training from this literature review in order to exemplify how each of the tenets reinforce the main principles of psychological safety.

Table 1

The Correlation between Improv and Psychological Safety

Improvisation Tenet (2015)	Moshavi's Benefits of IMPT (2001)	Edmondson's "Set the Stage" (2019)	Edmondson's Proposed Precursors (2002)	Edmondson's Leader Characteristics (2003)	Resulting Psych Safety (1999)
Ensemble / Co-creation	Team building and enhancing creativity and innovation	Substituting candor for silence and engagement for fear	Emergent group dynamics.		Confidence that team won't embarrass reject or punish for speaking up
Yes, and / Accept and Heighten	Developing trust	Expressions of appreciation	Trusting and respectful interpersonal relationships	Explicitly inviting input and feedback	Interpersonal trust and mutual respect
Authenticity / Celebrating Failure	Reducing risk / fear of failure	Destigmatizing failure, Sanctioning clear violations	Practice fields	Modeling openness and fallibility	Letting go of thoughts of negative consequences of expressing ideas and allowing to be oneself
Listening and Communication skills	Interpersonal communications			Being available and approachable	

Table 2

How the Tenets of Improv Reinforce the Main Principles of Psychological Safety

	Edmondson's Psychological Safety Components (1999)		
Leonard and Yorton's Improv Tenets (2015)	Confidence that team won't embarrass reject or punish for speaking up	Interpersonal trust and mutual respect	Letting go of thoughts of negative consequences of expressing ideas and allowing to be oneself.
Ensemble / Co-creation	<ul style="list-style-type: none"> - All ideas are good ideas - Letting go of competition, hierarchy, and the need to be the star in the room - Enough credit for all - Being in the moment, being both a giver and taker, and surrendering the need to be right 	<ul style="list-style-type: none"> - Finding the idea, not your idea - Group's goals trump individuals - Ceding control - Asking questions - Willingness to change (and thereby to be changed) 	<ul style="list-style-type: none"> - Willingness to change and/or let go of one's agenda - Eradicating fear - Candor is rewarded, not punished
Yes, and / Accept and Heighten	<ul style="list-style-type: none"> - Affirming and building - Setting up the next person for success - Play the scene you are in 	<ul style="list-style-type: none"> - People care about one another and try to support each other's efforts - Setting up the next person for success - Come to see that trust is given as a gift and are more likely to reciprocate in the future - Resolve its conflicts 	<ul style="list-style-type: none"> - Filter and judge less - "Take off filters at the early stage of a brainstorm session, you allow ideas to go to new places, and you discover new connections that conventional wisdom doesn't account for" - Experimentation and is tolerant of "competent" mistakes - Share leadership roles
Authenticity / Celebrating Failure	<ul style="list-style-type: none"> - Mindfulness - No condemnation for failure or ideas - Success is based on all classmates sharing responsibility for the outcome - "My only obligation on stage is to my scene partner, whose only obligation is to me...a net of support is constructed from the openness, trust, and acceptance expressed within the ensemble. Individual vulnerability creates collective strength" 	<ul style="list-style-type: none"> - Authentic self brought to table shows vulnerability - Feel free to speak honestly and assertively - Play the scene you are in 	<ul style="list-style-type: none"> - Every time you learn to be unafraid, your brain changes - Helps remove the fear of being "wrong" - Move along at a pace that doesn't allow for second guessing or self-judgment

Listening and Communication skills	<ul style="list-style-type: none"> -Requires empathy -Present in the moment -Mindfulness -Verbal agility 	<ul style="list-style-type: none"> -Ability to read nonverbal cues -Practice for being a better human -Loud group mindfulness -Listening to understand not waiting for chance to respond 	<ul style="list-style-type: none"> -Requirement to contribute freely -Deep listening skills less time to worry about self
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Summary

Improvitational training has been used to train businesspeople for years. The studies explored above have shown that it can increase team members' ability to be present in the moment, to help set each other up for success, to celebrate failure, and increase communication skills through better listening. Psychological safety is a group level construct that is beyond interpersonal trust where team members feel safe to be themselves and speak without being ridiculed or condemned. Not many studies have examined how to encourage psychological safety, but Edmondson (2003, 2019) has suggested ways to increase it and that leaders can be trained to set the stage for it. Moshavi (2001) describes how improvisational training can create the environment that describes psychological safety. Therefore, it is reasonable to believe that improvisational training can have an effect on psychological safety in teams. This study extends the research on the effects of IMPT on psychological safety by exploring how team members report their perception of psychological safety after such training. It also aims to understand what factors can potentially instill a sense of psychological safety in a team.

Chapter 3: Methods

Research Methods

This chapter describes the methodology used for the research project. It begins with a restatement of the research purpose, followed by a description of the study method.

Research Purpose

This study extends the research on the effects of IMPT on psychological safety in teams by exploring how team members report their perception of psychological safety after such training. The majority of the existing research studies how psychological safety affects people and organizations. The present study extends the research aiming to understand what factors can potentially instill a sense of psychological safety in a team.

Research Questions

1. Does IMPT impact teams?
2. Do the following Improv Tenets appear when people with IMPT report the perception of Psychological Safety in teams?
 - a. Ensemble / co-creation
 - b. Yes, and / accept and heighten,
 - c. Authenticity / Celebrating Failure
 - d. Listening and Communication skills
3. How does IMPT impact the perception of Psychological Safety on teams?

Research Design

This qualitative study addressed IMPT's effect on the perception of psychological safety in teams. A phenomenological design was used which involved in-depth

qualitative data. Phenomenological research is a “design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals about a phenomenon as described by the participants” (Cresswell, 2018, p. 13). The goal of capturing these lived experiences is to create and advance knowledge (Schwarz, 2016). All participants of this study have had IMPT and shared their experiences with their teams in relationship to their training. A sample of people who have received IMPT were interviewed to assess whether the improvisational training they received had any effect on the perception of psychological safety in their work teams. In this exploratory approach, the goal was to understand how the sample experienced their teams in relationship to their training.

Research Sample

Convenience sampling, where “respondents are chosen based on their convenience and availability,” (Creswell, 2018, p. 150) was used due to the limited time and resources available.

14 people responded to an open invitation to participate in the study. The sample included 11 people who had completed some IMPT and worked on teams. The sample consisted of participants from the age ranges of 25 - 35 through 56 and older, in various industries, across the United States. Invitations were sent via email, social media, and word of mouth through colleagues. 11 participants qualified by meeting the following criteria:

- 18 years or older,
- Received IMPT either in their place of employment or independently
- Currently a part of a team of more than three people

Three of the respondents were not interviewed for various reasons. Two did not work, or had not worked, as a part of a team. One was an elementary school teacher and one was a coaching consultant. One could not make their schedule work in the time allotted. There was a mix of genders, ages, levels of job experience, and IMPT. Each shared their memories and thoughts of how their IMPT had impacted their work on their teams.

The genders were coded: female, male, non-binary / 3rd gender, prefer not to self-describe, and prefer not to say. The ages were coded: 18-24, 25-35, 36-45, 46-55, and 56 or higher. The levels of job experience were coded: intern, associate/analyst, manager, senior manager, director, vice president, senior vice president, C level executive, president, owner, or founder. Table 3 shows the demographics of the sample.

Table 3
Participant Demographics

	Industry	Job Level	Type of Team	Level of IMPT	Reported Gender	Age
1	Software	Director	Management	Medium	Male	36-45
2	Higher Education	Director	Cross Functional	Medium	Male	46-55
3	Organization Development	C Level	Functional	Expert	Female	46-55
4	Theater and Hospitality	Analyst / Associate	Cross Functional	Performer	Female	25-35
5	Change Management	Manager	Functional	Performer	Male	46-55
6	Software	Analyst / Associate	Functional	Performer	Female	25-35
7	Theater and Religion	Analyst / Associate	Cross Functional	Expert	Female	22-35
8	Higher Education	Director	Management	Medium	Female	25-35
9	Automotive	Manager	Management	Minimum	Female	56 or Higher
10	Value Engineering	Manager	Flexing	Expert	Female	36-45
11	State Government	C Level	Management	Expert	Female	36-45

Instrumentation

Due to the COVID-19 pandemic of 2020, the interview portion of this study was conducted virtually. Each volunteer participant chose the location best suited to their situation and location. All interviews were conducted via Zoom, an online meeting

application, which allowed participants to see and hear me and vice versa. I was in a closed and private room for each interview. The research was conducted by interviewing 11 people who have had IMPT and were working on teams. The interviews were semi-structured. The interview guide was developed from Romanelii, Tishby, and Moran (2017). Romanelii et al. (2017) used open ended interview questions following the training as a part of a larger mixed methods study. They developed and taught 41 graduate students of social work in Israel in three courses of IMPT. The participants were asked open ended questions in order to understand how they experienced the training and how their practices changed after the training. This methodology is appropriate for use in this study as similar data was collected and interpreted.

The questions were kept as open as possible, with the intent that topics were brought up in order to hear the full experience of the training and its effects. This approach intended to understand how the training affected each participant at a personal level and to find out if the participants made any connections to their interpersonal experiences in their teams.

The questions seek to understand each employee's experience in the training, the participants' experiences after taking the lessons, their understanding of psychological safety, and how they see their improv training impacting their teams. The questions included were:

1. Gender: female, male, non-binary / 3rd gender, prefer not to specify, prefer not to answer
2. Age: 18-24, 25-35, 36-45, 46-55, 56 or older

3. Job Level: entry level / intern, analyst / associate, manager, director, C level executive (CIO, CTO, COO, CMO, Etc.), president, owner / founder
4. What type of improv training have you had?
5. Would you describe your team as a functional group, a self-directed group or a cross functional group?
6. Please describe the features of your team, such as the goal and nature of your task, how you organize your work, and what are some challenges you face?
7. How do you see your improv training show in your team?
8. Please describe any significant moments during your work-related applications of improvisation training.
9. Have you been able to implement any of your training when working in your teams? Please explain.
10. Definition of Psychological Safety presented on a shared screen via virtual platform while question is read aloud: Here is a definition of psychological safety (Appendix A). I'll read the question out loud while you read along with me. Which words stand out to you the most? What do you think about when you hear/read this definition?"
11. Have you worked on teams where there was no psychological safety? Please explain.
12. Do you think your training impacted your psychological safety on your team?

13. Has our time together brought up any other thoughts about improv and your team / workplace?

The order of questions was important. First, opening questions about their general experiences with their teams allowed them to move into a remembering state and open up to the conversation (Creswell, 2018). Next, content questions about the participants' memories of using their improv training in their teams were asked. Question 9 involved sharing the definition of Psychological Safety visually while I read it out loud. The participant was asked to share the words that stood out to them and asked what they thought about when hearing and reading the definition. This allowed them to put themselves in the space of psychological safety in their minds and verbalize the experience. The participant was then asked if they had been on a team where psychological safety was missing and to describe it. Asking to think of an experience where there was no psychological safety created a contrast to the previous question in order to understand the divergence between the two. Next, I asked whether the participants thought their improv training impacted the psychological safety in order to return to the memories where they perceived psychological safety and might correlate their IMPT to it. Finally, I asked if after thinking about psychologically safe, unsafe, and participant training in improv if anything else surfaced for them. This encouraged them to create coherence around the presence and effect of their IMPT and the psychological safety in their teams for the interview.

Table 4

Correlation Between the Research Questions and the Interview Questions

Research Question	Interview Questions
1. Does IMPT impact teams?	8, 9, 11, 13
2. Do the following Improv Tenets appear when people with IMPT report the perception of Psychological Safety in teams? Ensemble / co-creation Yes, and / accept and heighten, Authenticity / Celebrating Failure Listening and Communication skills	8, 9, 11, 13
3. How does IMPT impact the perception of Psychological Safety on teams?	10, 11, 12, 13

Qualitative Analysis

The qualitative analysis focused on shared terms, concepts, and descriptions that were generated during the interviews. Both emergent and predetermined codes were used. Traditionally, qualitative research in social sciences uses only emergent themes to study a phenomenon (Creswell, 2018). However, due to the nature of the framework of this study and because the research question seeks to discover whether the tenets of improv and psychological safety were present in the participants' experiences, a corresponding list of predetermined codes was generated. Prior to beginning the interview portion of the research study, I analyzed how the existing descriptions and research on IMPT correlates with the principles of psychological safety. These correlation tables rely on the tenets of improv and the study's definition of psychological safety. To answer the first research question, this data was analyzed for emergent themes and coded by hand (Creswell, 2018), referred to as Emergent - IMPT, in questions 8, 9,

11, and 13. These Emergent - IMPT were then grouped into fewer, broader themes based on the vocabulary used by the participants. The same questions were again analyzed for the appearance of the predetermined codes of the tenets of improv and are referred to as Precoded - Improv. I analyzed questions 10 and 11 to understand if the participants felt their IMPT impacted the principles of psychological safety in their teams based on the predetermined codes from the study's definition of psychological safety. The data regarding psychological safety is referred to as Precoded - Psychological Safety. Finally, the frequency of the Emergent - IMPT, the Precoded - IMPT, and Precoded - Psychological Safety were analyzed and charted.

This chapter described the methods used to identify the effects of improvisation training on psychological safety in teams. The study used a phenomenological approach which gathered qualitative data to determine participants' reactions and outcomes to their training in improv.

Chapter 4: Findings

Findings

The purpose of this study is to discover the impacts of IMPT on perceptions of psychological safety on individual members of teams with the following research questions:

1. Does IMPT impact teams?
2. Do the following Improv Tenets appear when people with IMPT report the perception of Psychological Safety in teams?
 - a. Ensemble / co-creation
 - b. Yes, and / accept and heighten,
 - c. Authenticity / Celebrating Failure
 - d. Listening and Communication skills
3. How does IMPT impact the perception of Psychological Safety on teams?

This chapter presents the results of 11 interviews with participants who have had various levels of IMPT and their experiences with psychological safety in their teams.

IMPT Presenting in Teams - Emergent Themes

The first interview question asked of the participants how (or not) IMPT presented itself in their work teams. During this analysis portion of the study, I focused on questions 8, 9, 11, and 13. When the participants were asked whether they thought they saw IMPT showing up in their teams, all of them responded that they did when thinking of their successful teams. The most common Emergent Themes were the perception of a Feeling of Equality, their Use of Self, the Playful Atmosphere, and their ability to Listen. The frequency of the emergent themes, as well as sample comments are shown in Table 5.

Table 5***Emergent – IMPT***

Themes	Sample Comments	Number of Coded Comments	% of Coded Comments	No. of Participants (out of 11)
Feeling of Equality	<p>There is a high level of camaraderie.</p> <p>It is not hierarchical and political.</p> <p>Group dynamic of fluidity that you all recognize in the same way.</p> <p>I feel comfortable taking risks in moment</p> <p>It is easier to let someone else be a star. I can trust other people are carrying the scene.</p> <p>Improv really encourages you to not stay within limitations.</p> <p>Improv creates openness.</p>	83	53%	11
Use of Self	<p>I was amazed with the spirit I brought.</p> <p>And amazed at how contagious it was - how I was able to use my whole self. I can access parts of myself that influence that group. I can disrupt a pattern.</p> <p>It is more than using techniques - it is almost an improv mindset.</p> <p>I'm more comfortable in my own skin, and more creative in the moment.</p> <p>It is useful in how I access my own capacity for creativity and bringing that to my team.</p> <p>Invites an environment where anything can go.</p> <p>Improv is all about relationships and character.</p> <p>Through the character's point of view.</p> <p>How would THEY respond to what they are given?</p> <p>In improv you have to build the same story together.</p>	35	22%	11
Playful Atmosphere	<p>The whole mood was playful and open.</p> <p>We kept things light and real. We have an easy banter.</p> <p>Everyone on the team has a good sense of humor and is not easily offended.</p> <p>Improv revels in play.</p>	17	11%	6
Listening / Being Present	<p>In improv you have to stay in the present.</p> <p>If you don't listen and observe in improv you will miss the gift your partner is giving you and you will miss the story.</p> <p>Meet people where they are</p> <p>In improv nothing existed before so it can't be wrong.</p> <p>It is new.</p> <p>When you are practicing improv and life, you are hearing them from where they are, not where I think they are.</p>	11	7%	6
I See My Influence	<p>What is my capacity to create psych safety by being vulnerable?</p>	6	4%	3

as a Leader	Having language is nice. It gives me permission to relax on the margins. It's okay to set the stage to create psychological safety. Me admitting my mistakes allows my team to share theirs.			
Other		5	3%	1
Total:		157	100%	

Feeling of Equality

The most common theme was Feeling of Equality. The participants mentioned things such as the presence of a norm of equality, no specific hierarchy, teammates being supportive of each other, and a feeling of safety and trust. Because of the atmosphere described, the participants felt comfortable to innovate, be creative, and collaborate with each other. All participants mentioned this theme, and it represented 53% of the coded comments. The feeling of being safe to innovate and make mistakes was a significantly mentioned factor in recognizing how participants' IMPT showed up in their teams. Participants shared experiences from their IMPT, working together as an ensemble to create scenes and stories. They mentioned accepting offers from team members as 'gifts' that moved the story along. They conveyed the similarity of the practice of creating together in IMPT and creating the same experience in their teams. Further, participants spoke of their involvement in their teammates' lives outside of work. For instance, one team gathered together to support a teammate when they lost her father. One participant shared:

It really comes down to trust and ... that a lot of the improv exercises, I think that's what they're designed to do. ... if you're in an improv situation and you're actually performing improv, there's just no room to have a either an autocratic approach because no one's actually running the show. ...you're co-creating. And there's no room for wildcards. ...everyone has to be about serving up to their teammates something that's going to work for the whole scene.

Another participant contrasted their current team to another team they are a part of, “It is just the level of camaraderie and kind of some of the easy banter and flow on the team, where it didn't feel hierarchical or as political as some of the other teams, especially like the posturing that can happen...”

Use of Self

The next most common theme was the recognition of the participants’ development of their Use of Self which was mentioned by all of the participants and represented 22% of the coded comments. They mentioned how comfortable they were in their own skin and in new experiences. They mentioned their ability to be in the moment and to tune into a room or their teammates. It was mentioned that in IMPT one must bring their whole self to the scene and that it transferred to their teamwork and interpersonal relationships. One respondent said their team was the first place they had been able to bring both their ‘work self’ and their ‘real self’ at the same time. It was also on what they described as a psychologically safe team. Another respondent said:

I feel comfortable being a risk taker. And I also feel comfortable fixing a scene problem or an observed problem. ...there are times that ... a joke will go off the rails or things won't work the way that you expected them to. And how do you kind of repair that in the moment? I think that that kind of training ..., it comes down to thinking about doing improv, like improv theater, especially, ... how do you give back to that other person so that they can come to where you are? ... you're taking a risk on stage with someone and you haven't offended them. You just have them in the dark a little bit. So ... you have to kind of repair that quickly and get them to where you are, remind them of the scene and where you are in that scene. I can see improv being important because in a way you ... emotionally remind that person ...that you are having a laugh, that everything's okay that ..., at heart, you are empathetic, or you're maybe sympathetic ... that they didn't get the joke or whatever that is, ... bring them in the same way back to the scene, which is that we're in a safe, good group, and everything's okay.... I just feel comfortable, ...making things up in the moment or taking risks because I feel like we can just get back ... to where we were, and we never stray too far.

One participant shared how they felt comfortable with their team:

I think it was more of a in what way did I change my use of self with a group because I felt more comfortable taking risks and experimenting? because I was like, “What do I have to lose?” Like, life is really short and I think improv gave me - I can tell I'm getting really much more, even talking about it, I feel a lot more animated - Oh, I miss my improv!

This some participant went on to share:

It's playing, its levity, and it's a “we don't have to take ourselves so seriously just to get work done.” Who says work has to be serious? And I think that's the spirit that I brought to it and I was amazed by how contagious that was. Again, I think that goes back to use of self. It's how I am aware of how I can access parts of myself, my experience, ways of being, ways of showing up in a group that influence it in a direction.

Playful Atmosphere

The third most common theme that was reported was a Playful Atmosphere which was mentioned by six of 11 participants and represented 11% of the coded comments.

Participants mentioned the lighthearted feeling that kept the atmosphere open. The open-minded experience of play allowed less linear thinking. One respondent said, “there isn’t one way from A to B, there are a thousand.” In addition to the playful mindset, humor was mentioned often. The ability to laugh and not take things seriously was transferred from IMPT to people’s teams. One respondent mentioned,

... we have a kind of improvisational style to the kind of humor we bring to our settings and who we are that's really critical to us maintaining our sanity and keeping our group working well. And it involves taking risks... there's a trust there that if you really were to do something that's completely out of bounds, ...it would somehow - it would, the ship would right itself, like it would find its center.

Another said, “improv not only encourages play, but it promotes play. ...I feel like that word is not even strong enough. It just - it revels in play.”

Listening and Being Present

The fourth most common theme that was reported by six of 11 participants and in 11% of the coded comments was Listening and Being Present. The participants remarked at how intently one must listen when in IMPT in order to progress the scene, build a character, or co-create a story. This skill of actively listening and responding to only what was presented, not any preconceived ideas of what the team members meant, showed up often in lighthearted and high stakes experiences. One respondent said:

A lot of what we learn in improv is .. “yes, and,” but it's also ... accepting the reality of what another person says... what they say is true. It's true for them. ... it's,...”Yes. Can you say more about that?” and not, “Well, that doesn't align with what I know. So that's wrong.” ... especially when we're in these simulations of what they say is true for them, which is true to improv too, if you're making a character, nothing existed before. So, whatever they're saying, is true for them because they're making it up. There's no way it can be wrong.

Improv Tenets Presenting in Teams - Precoded - IMPT

The second research question of the study sought to determine if the following Improv Tenets appear when people with IMPT report the perception of Psychological Safety in teams:

- Ensemble / co-creation
- Yes, and / accept and heighten,
- Authenticity / Celebrating Failure
- Listening and Communication skills

The same questions from the first research question were analyzed again to determine if the four predetermined improv tenets were mentioned, referred to as Precoded - IMPT.

All four of the Improv Tenets showed up in all of the participants' comments.

Additionally, as can be shown in Table 6, the four tenets were mentioned in the following frequency:

Table 6

Precoded – IMPT

Improv Tenet	Number of Times Mentioned
Ensemble / Co-Creation	54
Listening / Communication Skills	36
Yes, And / Accept and Heighten	35
Authenticity / Celebrating Failure	29

Ensemble and Co-creation

The Improv Tenet with the highest frequency was Ensemble and Co-Creation. The participants spoke of teams that worked together with a fluid dynamic, teams that built upon what other members offered, and teams that collaborated on projects, ideas, and feelings. They spoke of an atmosphere where they felt comfortable to be themselves and offer many different ideas, no matter how silly they might sound. They spoke of feeling the freedom to innovate and be creative. One respondent said that improv really encouraged them to “not stay within limitations and not ... accept limitations.” Another respondent said:

...especially because of COVID, there was a lot of stuff where we just had to brainstorm - problem solve... So that ability to facilitate brainstorming, ... there's many avenues to that; there's making sure that everybody knows that there's no such thing as a bad idea. So that you have a safe space to just throw stuff. Throw spaghetti at the wall. There's also the being able to pull out that creative aspect of people, so that they're thinking outside of the box. How do you create the environment for people to actually explore in their own imagination? ... So you do that with games, you do that with getting them to laugh, you feed them as well. It's not easy to do and when you're all separated [due to Covid19], but you can play games.

Listening and Communication Skills

The second most mentioned tenet of improv was Listening / Communication Skills with 36 out of 154 coded comments. One respondent said, “If you don't listen and observe in improv, you will miss the gift that your partner is giving you and then you won't build the same story.” Another said, “I have to listen so hard,” and “it's that idea of staying in the present, and opening up and listening to each other's ideas and not negating what somebody brought to the table.” Another participant shared:

that ability to listen fully it's ... difficult sometimes ... but that practice of listening ... that depth has definitely improved through improv and I see it now when people are just kind of venting or complaining about something about their job, and how ... to be fully present when I'm just listening and not listening to reply and not listening to respond, but active listening.

Communication is more than just a verbal experience. According to one participant, IMPT taught them how to interpret even more: “Improv training shows you how to think quickly and how to navigate based on the emotional intelligence and what's happening with the body language and the way people are and where they're going. You have to be actively listening.”

Empathy is a part of authenticity and celebrating failure. When working together, teammates must make the effort to see things from each other's points of view. One participant said, “when you're in a high stress situation, you have to be on each other's side, which is the same with improv. You're building the same story. You have to trust each other. And you have to do your part to get the accomplishment done, or in improv, to tell the story.”

Yes, And and Accept and Heighten

The third most mentioned improv tenet was Yes, And or Accept and Heighten with 35 out of 154 coded comments. ‘Yes, and’ one responder said, “removed the dreaded ‘yeah, but’” from his team’s vocabulary. It allowed the responders to accept any idea and build upon it. It allowed them to recognize the ideas as gifts to expand upon.

One stated:

with the “yes, and” rule [in improv] where you don't shut down people's ideas because then the scenes screeches to a halt, you build upon and improve other people's ideas. And I think that's kind of a general good advice for working on a team in any setting. I think practicing that kind of thing in improv training can have a positive effect on life in general and how people approach problems.

Another participant said,

Because with COVID, ... everybody's experiencing a lot of low motivation, and difficulty, like staying on task and focusing including myself. So it's not anything to be angry or mad about. It's just the reality of the situation. But that doesn't cause any interpersonal conflict. In fact, I think that we're growing closer together because we're empathizing with each other, more, and sympathizing with each other more.

Finally, one participant said about their team:

I never feel like I'm going to say anything that will hurt them, and they can't say anything that will hurt me. And that comes from trust. And you can't force that trust. I've been on teams that have tried to force trust, but there's just a real - you need to be genuine, and you need to be honest, and raw in order to garner that trust.

Authenticity and Celebrating Failure

The final tenet that was mentioned less than the others, although by all participants, was Authenticity / Celebrating Failure. The participants spoke of being allowed to be their whole selves when in IMPT and being able to bring that feeling to their teams. They spoke of having a confidence and a comfortableness in IMPT and seeing that translate to their teams as well. One participant shared that on a team where

they felt comfortable, it was the first time they had been able to bring both sides of themselves to work. Another shared that they noticed a shift during their afterhours IMPT in their work experience:

it wasn't, okay, now I'm switching into work mode. I'm changing my clothes. I'm doing this. I'm doing that. It felt like more of an integrating experience. It's like I can be consistent, I can be this same person in another setting, I don't have to adopt a persona, I can be more of myself. And I can carry that from one setting to another without necessarily feeling like, "Oh, I have to play this role. Here's work John." I think that boundary kind of got dissolved a little bit more, I can be more of me at work and people accept it. And it's actually really helpful and effective. And I see that it's accepted so that I want to do more of it.

One participant shared:

I think this is the first time in a long time I've been able to bring that side [of me] to a team... I think it's extremely positive because when you have a well functioning team you have creativity and you have... a safety net, just like in a circus when you have a safety net, you're gonna have people that are going to take more chances and more chances mean bigger wins and less risk and more trust and more value and you get to feel like you have something to bring - something positive and powerful. And so I'd say with the improv training it has made me more comfortable in the situation to be able to, to not know what my day is going to hold until I get in the door and knowing that I will run with it and be comfortable with it. And if I fail, my boss is going to call me and laugh about it with me. Because it's going to be one bump. Not a - nobody died. That's that's what [my boss] says to me whenever I'm like, oh god, there's a problem. He's like, "nobody died." All right, that's right. Nobody died. We're fine. We're fine.

Another participant shared how IMPT has helped them understand themselves in order to be more authentic. After sharing how IMPT taught them to understand characters, both characters they acted opposite and their own scene character, they said, "because in work, it's you - not a character, you have to understand your point of view."

IMPT's impact on the Perception of Psychological Safety on Teams

Precoded - Psychological Safety

During this analysis portion of the study, I focused on questions 10, 11, and 13 for the data. I read and displayed the definition of Psychological Safety (Appendix A) to

each participant and asked which words stood out to them. They were then asked what they thought about when they read and heard the definition. Next, I asked if the IMPT had any impact on the perception of Psychological Safety on their teams. All respondents stated that it did. Table 7 presents sample comments and the frequency of the psychological safety principles.

Table 7

Precoded - Psychological Safety

Principles of Psychological Safety	Sample Comments	No. of Participants (out of 11)
Confidence that Team Won't Embarrass Reject or Punish for Speaking up	<p>I'm not replaying and second guessing how I showed up. I can let down and relax. No one prefaces their thoughts with "this is a dumb idea." It shows up as me having confidence to be able to admit my mistakes - and also move forward from it. How do you give back to a person, so they come back to you? It is not about blame or saving face. People feel free to innovate. We don't shut down ideas, we build and add to other people's ideas. [Improv] adds to the safety of team dynamics. My favorite thing about improv is no one thinks it's stupid. Denial and arguments are looked down on in improv. It's a good rule to carry into work. Don't argue with them. Don't deny their experience I am actively valuing my team members, listening, honoring.</p>	11
Interpersonal Trust and Mutual Respect	<p>[Improv] is creativity and you have a safety net like in the circus. Have people take more chances and have more wins. We accept rough edges. What I'm trying to do is create a container where people can let walls down and trust each other. I absolutely feel like I'm in a team. It is easier to let someone else be a star. I can trust other people are carrying the scene. I learned to be a person to take responsibility. Psych. safety is deeper than harmony - it includes vulnerability and respect [Improv helps in] helping someone freely offering info on the team. The agenda isn't why we're here today. The purpose is to find out where people are and where they need to be. Improv is all about relationships and character. If you help other person shine, you shine as well. We meet people where they are.</p>	7
Letting go of Thoughts of Negative Consequences of Expressing Ideas	<p>You can call people out on when you think their biases might be coming into decision or opinion. We assume you are coming with positive intent. I can feel safe to know it is to enrich the team without judgement and one upmanship. Confidence to be able to admit to self if you've made a mistake and graciously call out those who've made a mistake, too. It has given me a lot of confidence in how to speak up. There is the freedom to disagree and share different perspectives. Improv creates openness. It takes your brain and reminds it to blow out any walls that might be coming up. This isn't "Midwest nice." Not supposed to talk about people not in the scene - good life lesson: don't talk about people who aren't in the room. I feel like my boss will call me and laugh when I make a mistake and say, "nobody died."</p>	5

Principles of Psychological Safety	Sample Comments	No. of Participants (out of 11)
Other Comments	Practicing in improv training can have positive affect on life in general. I'm longing for psych safety. That is the team I want to be on. I wish we spoke about it here. My group is special - now I recognize how special. What is my capacity to create psych safety by being vulnerable? This team hasn't always been this way, so I know when it is falling within this realm of psych safety I see how much there is a state of mind and way of being, it's almost an improv mindset - not about techniques. I think it isn't something anyone ever says in my team it is just assumed. I knew the minute we had safety - laughter returned to office. First time in a long time I've been able to bring this part of myself to my work.	

Confidence That the Team Won't Embarrass, Reject / Punish Someone for

Speaking Up

When asked to elaborate about how the participants thought IMPT impacted the psychological safety of their teams, the most commonly mentioned principle was the confidence that the team would not embarrass, reject, or punish someone for speaking up. All participants mentioned it. It was mentioned that participants had more confidence in general after their IMPT; confidence in their team, that they would not be embarrassed by teammates, confidence in themselves, and even confidence in their creative abilities. The confidence mentioned stemmed from practice being in the moment, recognizing one needs to move a scene along, recognizing all responses from teammates as gifts, and the lighthearted atmosphere of a psychologically safe team. Safety to innovate was also mentioned within the most mentioned principle. It was stated that feeling free to speak up without fear of embarrassment, rejection, or punishment allowed the responders to bring their whole selves to the team. People mentioned that feeling free to innovate was always

present allowing them to brainstorm openly without restrictions. A participant shared their thoughts about their current team and contrasted it with a previous one:

I'm just not preoccupied or worried about - I'm not self monitoring, like, "Oh, I wonder how this will play," or "I wonder about this." There's almost like, you can kind of let down and relax and be like, "okay, I know how this is gonna play out" and where I see this. It's not going to be about embarrassing or rejecting or punishing, and it's easy to think of an example with another team that I'm part of where, like, I don't know how this one woman is going to end up twisting this or using this information. So I constantly feel on guard. And this is the opposite. I know that it exists, if I'm not thinking after the meeting, where I don't have like a vulnerability hangover... where I'm thinking, "oh, I wonder if I should have said that. I wonder if that's going to come back." I can tell I'm not replaying what happened. Then there was probably psychological safety present, because I'm not second guessing myself and how I showed up. [In the other team] I just feel judged and critiqued. And so I tend to just avoid and shut down.

Another participant described IMPT:

I think my favorite thing about improv is like, no one thinks it's stupid. Everyone pays a lot of money...classes are like 300 bucks or something. So if you're gonna go for eight weeks and think it's stupid, like, there are more people who think it's cool than stupid, so the stupid people think it's cool. You know, it's cool. I think it's cool.

This same participant contrasted their IMPT experience with their current psychologically unsafe team: "at work, new ideas, fun ideas, the harmony [everyone thinks it] is stupid. And there's too many people that think it's stupid." They shared that they did not feel comfortable sharing in this team at all because of the constant feeling they would be embarrassed and/or rejected.

Interpersonal Trust and Mutual Respect

The second most mentioned Principle was "interpersonal trust and mutual respect" with 20% of the comments. One participant said,

There's that element of openness. I think improv creates an openness. And what it does is that it takes your brain and reminds it's like this reminder to blow out any walls that may be coming up ... and that is usually what I'm trying to do ... is create this container where people can let their walls down and trust each other.

One participant described their impressions of psychological safety this way:

..you have harmony, which is not the same thing as what we're talking about as psychological safety. Because in a lot of organizations harmony is: we celebrate birthdays, we get a cake or we get bagels. And, you know, we go to trivia nights together, it's harmony. It's not necessarily related to the work we do as a team, where we also have to have respect and vulnerability. And so I view psychological safety as deeper than harmony. Yes, we need to get along with everybody. We absolutely do. At the same time, we're actually called to produce something here. And so when I go into an organization, and one of the first things I hear is Oh, we're like a family here. I wonder what that means? Because family is one of those words that is different for everybody. Is that the kind of family where we're just going to get through Thanksgiving no matter what people talk about? We're just gonna lay low chill out and not address the elephant in the room? Or is it the family that can have healthy conflict, and has an overall goal of we're family, and we're going to be together. And so let's work through these things.

A participant shared how they work to build trust in their team, “I try really hard to not take sole credit when it's something that clearly was a team effort,” and “It's that it's that feeling that if you help the other person shine, then you shine as well.”

Letting Go of Thoughts of Negative Consequences of Expressing Ideas / Allowing to be Oneself

Finally, but still prominent, was “letting go of thoughts of negative consequences of expressing ideas and allowing to be oneself” with five of 11 participants mentioning it.

One responder described how their IMPT impacted the perception of Psychological Safety on their teams:

[In improv] you just play. ... And with play comes - I love that idea of using it for psychological safety because with play comes that idea of letting go of judgment, letting go of self-judgment, which is often the hardest hurdle to overcome. But even judgment of others, it just is like you have to give all that crap up. It's just allowed play. And if you exist in a world of play, then there's so many more possibilities. It isn't about “A plus B equals C” or, “this is a problem, this has to be the solution.” ... If you need to go from A to B, you get there 1000 different ways. And you see so many different ways you can get there.

Further, they said:

[In improv] there is that element of openness. I think improv creates an openness. And what it does is that it takes your brain and reminds ... to blow out any walls that may be coming up. Because in improv ... you can't have any rails or any boxes. Because if you do, you're going to stumble through the scene, if you're going to try to fit it into this or that, you stumble through it, but if you just blow the walls out, then you can really lean into the experience and have the experience. That translates into teamwork. From a sense of openness and creativity and innovation, the willingness to not box the problem or the solution in that way, [but to] really keep blowing the walls out. And I would say I'm not perfect at that, but I can feel when the walls come up. And I recognize it going there: I am back in that box. I focus and try to throw the lid out and blow the walls out.

Summary

This chapter presented the findings of the qualitative analysis used to provide answers to the study's research questions. The research sought to learn if IMPT impacted people's perceptions of psychological safety in their teams. The data suggests that IMPT does impact psychological safety in teams. The data suggests that it impacts psychological safety in a positive way. Chapter 5 will discuss the conclusions, implications, and recommendations based on the dominant emergent themes and the precoded themes of each research question and discuss the implications and interpretations of IMPT's impact on psychological safety in teams. Additionally, the implications of the findings will be discussed as well as suggestions for further research.

Chapter 5: Discussion

Purpose of Research

The purpose of this study was to assess the impacts of work-related applications of improvisation training (IMPT) on psychological safety in teams. The study attempted to answer the following research questions:

1. Does IMPT impact teams?
2. Do the following Improv Tenets appear when people with IMPT report the perception of Psychological Safety in teams?
 - a. Ensemble / co-creation
 - b. Yes, and / accept and heighten,
 - c. Authenticity / Celebrating Failure
 - d. Listening and Communication skills
3. How does IMPT impact the perception of Psychological Safety on teams?

This chapter will discuss the conclusions of the research, recommendations based on the dominant emergent themes and precoded themes and discuss the implications.

Additionally, the implications of IMPT's impact on psychological safety in teams and on Organization Development will be discussed as well as suggestions for further research.

These results do not provide definitive answers but suggest valuable insights into the possibilities that IMPT enhances the conditions that lead to psychological safety in teams. IMPT.

Summary of Findings

In response to the first research question, the interview participants suggested that their IMPT was present in their teams in the following ways: the existence of a feeling of equality, the use of self, a playful atmosphere, and improved listening skills.

When asked which improv tenets they saw present in their teams, they shared all four of the precoded improv tenets I had included: ensemble / co-creation, 'yes, and' / accept and heighten, authenticity / celebrating failure, and listening and communication skills.

When the definition of psychological safety was shared with the participants and asked what it meant to them, they shared the top four descriptions: confidence that team would not embarrass, reject, or punish someone for speaking up, trust and mutual respect, people feel free to innovate, and mistakes are caught and learned from. When asked if they felt if IMPT impacted their psychological safety on their teams, it was a unanimous yes. All 11 participants pointed to tenets of improv and their IMPT as helping set the stage for psychological safety. They commented that because of their training they were better able to bring their authentic selves to their teams. They were able to accept teammates' ideas and heighten them. They could recognize every offering as a gift. Many had not heard the definition of psychological safety before the interview and commented often about how critical it is to a successful team. One participant said they wished there was a contract they could present at the beginning of any job or team from here forward, binding all involved parties to psychological safety. One shared not only how important it is on their work teams, but also how important it is in their improv troupes. Further, all participants shared experiences of teams they belonged to that lacked psychological safety. One was 30 years prior and one was a participant's current team. The recurring

thought was the obvious effect the experiences still had on the participants. The participants spoke of feeling unsafe, nervous, on edge, judged, critiqued, and even physically ill. They spoke of the atmosphere as low creativity, innovation, and competition. The participants described their resulting actions as having their guards up and acting cold and dismissive. These are all things that are the very opposite of an improvisation atmosphere.

The following sections provide the major conclusions for the study.

IMPT Presenting in Teams

I made several conclusions from interviewing the participants and analyzing the data. First, the IMPT does impact people's teams. This supports the research in multiple ways. Edmondson's (2002) research and proposition that practice fields will impact working teams suggests that not only do highly technical situations require practice, but so do interpersonal relationships and team situations. Edmondson (2003) found the engagement of the practice teams significantly correlated with the team psychological safety. Additionally, Vera and Crossan (2004) suggest that improvisational exercises are transferable to organizations. They suggest that improvisational theater skills are skills that can be taught.

The participants reported drawing from their practice in IMPT for their confidence in new and critical situations, their use of self, keeping their teams playful, and their listening and being present skills. The participants talked about being able to lighten a mood in the room after reading body language and the feelings that were present. They mentioned that as they had studied their scene partners' and their own characters, they could take this training into their teams in order to understand them and

where they were. Participants shared how in an improv scene it was critical to move a scene along and not block a scene partner or shut them down. This was taken directly into their teams.

The participants shared the creativity and innovation that is present in IMPT where there are no boundaries, or no walls to contain ideas. They shared that they brought this playful, innovative mindset into their teams. They even encouraged it in their teammates. They spoke of all ideas being good ideas and the feeling of breaking through those created walls.

Tenets of Improv in Teams

Another conclusion I made is that the tenets of Improv do show up in teams, both explicitly and implicitly. Sometimes the participants would mention the actual tenet as in the case of ‘yes, and,’ and other times they would talk about the environment, such as the innovative dynamic of their teams which embodied being in the moment and surrendering the need to be right which is the tenet of ensemble and co-creation. This supports the research in multiple ways. Leonard and Yorton (2015) describe how IMPT, through the use of these tenets, improved performance in a business and classroom setting in creativity and innovation, learning, cultivating leadership, fostering teamwork, building trust among team members, helping to alleviate fear, increasing communication skills, increasing mindfulness, increasing agility, and reducing social anxiety.

Ensemble / Co-creation

The participants all described the high level of camaraderie, fluidity, and openness of their teams. They said it was easy to trust that their teammates would have their back, that they felt comfortable letting others be the star, they let go of ‘their’ idea in

favor of the ‘best’ idea. This aligns with Leonard and Yorton’s (2015) description as letting go of competition, hierarchy, and the need to be the star in the room. It is believing that the team is more powerful than the individual. They point out the experience of fostering co-creation, ceding control, asking questions, and acknowledging everyone’s contributions. Huffaker and West (2005) describe ensemble as “the willingness to change (and therefore be changed)” (p. 856). They watched as their students became closer after IMPT and more willing to contribute to the team. They noticed that their students even interacted more openly with visiting panelists who were not part of their classroom after the IMPT (2005).

Improvisation is a team construct, but it did not appear insular in the research. An improv ensemble is co-creating with its audience, with each other, with the moment. The participants spoke of using their IMPT in their teams, with clients, even with volunteers. Leonard and Yorton (2015) describe how to foster co-creation by finding the idea, not your idea, ceding control, eradicating fear, and asking questions. The participants brought this up again and again.

Listening / Communication Skills

Over half of the participants explicitly spoke of their increased communication skills after IMPT. Most often they spoke of being able to listen more intently with IMPT. The success of an improv exercise or performance relies on all of the participants co-creating a single event in real time. They are creating something that did not exist before they stepped on the stage. In order for them to create together, they must be deeply tuned into each other and listening to what each is saying. They must treat each word as a gift and carry their portion of the scene. The practice in IMPT of this deep listening

transferred to their lives and their teams. This supports the literature where Boesen et al. (2009) described their students after IMPT as paying more attention to body language, emotional context, and subtle inflections. Scinto (2014) quotes Rebecca Waber, who leads a team of consultants at Innosight in Boston, “what you need to do in improv is listen closely to every word a scene partner is saying. Everything is moving so fast; you may have missed the most interesting thing. The audience may have heard it, and if you missed it you haven’t really driven the scene forward, you don’t know what to react to” (para. 5). The participants spoke of teams who were listening and tuned in at this level. Leonard (2019) describes improv as ‘loud group mindfulness’ and says it requires its players to be ‘fiercely present.’ Romanelli et al. (2017) also found therapists to be better at focused attentive listening after IMPT. They mentioned specifically being less distracted by intellectual thoughts and thoughts about what should be said versus experiencing their clients in the immediate present. It is logical that practicing this deep presence and listening in IMPT would allow team members to bring this skill to their teams.

Yes, and / Accept and Heighten

Over half of the participants interviewed explicitly mentioned ‘yes, and.’ This is a foundational tenet of improv and everything builds from it. Bermant (2013) calls it “the unambiguous and complete support of performing partners for each other” (p. 3). ‘Yes, and’ is not just accepting, but building on other’s ideas: accepting the gift and making it even better. Leonard and Yorton (2015) said, “when people are building and supporting each other’s ideas quickly, they tend to filter and judge less, and when you take off filters at the early stages of a brainstorm session, you allow ideas to go to new places, and you

discover new connections that conventional wisdom doesn't account for" (p. 31).

Participants described being able to blow out the walls of ideas and let go of self judgement. They spoke of 'blocking' someone with a 'yeah, but' which would take a brainstorming session or scene to a screeching halt. They spoke of a 'yeah, but' stopping a team member's sharing cold. During this time of COVID-19, many of the participants had to completely change the way their teams were working, and they had to do it almost overnight. The ability to quickly look at the world in a whole new way without judgement before they even began, they said they owed to the agile brainstorming that is a part of 'yes, and.'

Authenticity / Celebrating Failure

The participants interviewed mentioned a feeling of confidence, or safety, in being themselves in their teams where they perceived psychological safety. They said they felt they could say almost anything and not hurt anyone's feelings. They described environments where ideas could be challenged, and their thoughts and ideas could flow. The literature on IMPT supports this research by explaining failure is not simply tolerated, it is celebrated. It is recognized as the font of innovation. If troupe members are not aiming for failure, they will never get near the flame of creation (Leonard & Yorton, 2015). The participants described feeling valued for their creativity. One spoke of creating the space for others to feel comfortable being lighthearted. One mentioned being vulnerable first in order to allow others to be honest. Dr. Mark Pfeffer says, "Every time you learn to be unafraid, your brain changes. [Improv is] the quickest way to get to the neural pathway change because it puts [people] in a situation where they're facing their fears" (Leonard & Yorton, 2015, p. 22). Crossan and Hurst (1997) describe

organizational cultures that value ‘efficiency over effectiveness’ and ‘exploitation over exploration’ tend to have low levels of experimentation and do not accept mistakes. In their research on mediators that make IMPT successful in business, they found that the opposite must be true.

IMPT’s Impact on Psychological Safety

The final research question asked if IMPT impacted the psychological safety of teams. I concluded that IMPT does impact the psychological safety of participants teams and in a positive way. Often participants mentioned an ‘improv mindset’ that they carried with them in multiple situations. A mindset that embodied all of the improv tenets. This training encourages leaders to learn to let go of the sublimity of their own ideas and learn to build on others’ and know when to lead and when to allow others to lead (Crossan, 1997, 1998).

After hearing and reading the definition of psychological safety, all 11 participants concluded that their IMPT had a direct impact on their perception of psychological safety on their teams. They shared that after practicing IMPT they could see how they used it in interacting with their teams in the feeling of equality, use of self, playful atmosphere, and listening. They spoke of their increased confidence which allowed them take risks in the moment, be their authentic selves, and help create a feeling of equality. They mentioned how IMPT helped them tune into themselves on the stage in a deep way which they had developed into their presence on their teams. They said they recognized their own capacity for creativity and could bring that to their team. They spoke of how the idea of play in IMPT helped them keep the mood light and real which reduced the competition, fear of negative consequences, and fear of embarrassment on

their teams. They said IMPT helped them let go of judgement of others, of ideas, and especially of themselves. The participants commented on the critical nature of listening in IMPT and how practicing it in the exercises allowed them to stay present when working with their team, accept their team's offers as gifts, and meet their teammates where they are.

The idea of ensemble and co-creation is also the foundation of psychological safety. If the team believes all ideas are good ideas, team members will have the confidence that they will not be rejected, embarrassed, or punished for offering them. If you are making each other the star and recognizing your offerings as gifts, mutual respect and interpersonal trust will grow. If candor is rewarded and not punished, team members will be allowed to let go of thoughts of negative consequences of expressing their ideas. IMPT has given the research participants these tools and they remarked at how it helped them to be more likely to contribute to the psychological safety of their teams.

Listening and communication skills are key for psychological safety. Listening requires empathy, or being present in the moment which fosters a confidence that the team members will not be rejected, embarrassed, or punished for offering ideas or information. Leonard and Yorton (2015) describe improv's effect on listening as "practice for being a better human" and "listening to understand," not "waiting for the chance to respond" (p. 17). This ability to listen deeply and recognize subtle cues and body language help foster interpersonal trust and mutual respect. If one is deeply listening, Leonard and Yorton (2015) say they have much less time to worry about themselves. In this state, it makes sense that it would be easier to let go of thoughts of negative consequences of expressing ideas.

A limited amount of direct research exists on the link between IMPT and psychological safety. I have attempted to bridge the gap between the tenets of improv and resulting psychological safety. Based on the research in this study, the participants suggested that their IMPT did indeed show up in their teams, and further it impacted their psychological safety on those teams.

‘Yes, anding,’ affirming and building, accepting and heightening, are contradictory to embarrassing, rejecting, or punishing a teammate for speaking up. They cannot both exist at the same time. If a team member's time is spent setting up their teammates for success it will surely lead to interpersonal trust and mutual respect. ‘Yes, anding’ is about filtering and judging less, leveling the playing field and creating things together better than could have ever been created alone. Thoughts of negative consequences of expressing ideas cannot exist in that environment.

Improv and IMPT celebrate failure. Releasing the fear of failure allows innovation and creativity. If failure is celebrated it cannot allow room for fear of being rejected or embarrassed or punished for speaking up. Psychological safety requires this confidence. Psychological safety exists in an environment where mistakes are caught and learned from. Improv is learning from risk taking that is aimed at failure. Finally, existing in an environment of learning and creativity is the antithesis to dwelling in thoughts of negative consequences of expressing ideas.

Limitations

There were several limitations to this study. First, 11 participants were interviewed, resulting in a small sample size. A larger sample would present more accurate values and allow outliers to be identified. Second, Edmondson (2002, 2003)

describes psychological safety as a group construct. The participants were interviewed individually and spoke of their teams from an individual standpoint. Third, participants all had IMPT, so there is no resulting measure of team experiences without IMPT. Fourth, all participants were volunteers which implies a positive inclination towards IMPT. Finally, there was subjectivity in my interpretations.

Theoretical Implications

The theoretical implications of this study suggest that IMPT does have a positive impact on the perceived psychological safety of a team. If IMPT can be identified to create the conditions that foster psychological safety, it allows for a new avenue of research in the area. Psychological safety is critical to high functioning teams and the wellbeing of its members (Duhigg et al., 2016). If ways to set the stage for it can be identified, they can be implemented in teams.

Of note in this study are the participants' statements about team leaders and their thoughts about how they perform themselves as leaders. Creating a space where one's team feels safe to innovate and be authentic is critical. Understanding ways of training and understanding one's own presence, as a leader and teammate, is essential.

Organization Development Implications

If IMPT can create, or improve, psychological safety in teams, OD professionals have the opportunity to implement it in teambuilding and large group interventions.

Recommendations

The spaces we share with teammates can be creative and innovative (psychologically safe) or they can be scary and fruitless (psychologically unsafe). This research suggests that having an improv mindset sets the stage for psychological safety.

Organizations create this atmosphere of ensemble, listening, ‘yes, and,’ and authenticity. It is my recommendation that leaders and teammates state early, and often, that the team is an ensemble; that it is stronger and more successful as a whole than it is as a group of individuals. The context for the team must be created, explicitly named, and protected. Team building should be emphasized and prioritized. Leaders must model that the goal is successful teams who innovate and co-create, not hierarchical systems with directions hailed down from above. Active listening, ‘yes, anding,’ and co-creation need to be taught and modeled as values in the organization and in the teams.

The participants of the study often remarked at how their leaders presented themselves and held space for their teams. They also reflected on how they worked to create a space for psychological safety as leaders themselves. It was interesting that the leaders discussed putting the rest of the members at ease intentionally, creating a space for psychological safety even before knowing what psychological safety was. Often participants would start talking about teams of which they were a part and would switch to sharing how they set the stage for their reporting teams. One said, “having this language is nice, it gives me permission to relax about things that I might worry about on the margins - it's okay to set the stage.”

Many mentioned how IMPT gave them the presence of mind to accept feedback in the moment. Their goal was to accept each as a gift and encourage more feedback in the future. One participant said their first words when receiving feedback are always, “Thank you for telling me.” A recommendation for leaders and team members alike is to work to create this atmosphere and welcome this feedback. This supports Edmondson’s

(2003) work on leadership characteristics. The following are some suggestions that emerged in the research:

- Explicitly ask for feedback.
- Explicitly say, “I value your input so I can be a better leader.”
- Express gratitude for all feedback.
- Don’t criticize or critique feedback but say “thank you for telling me.”
- Express one’s own faults in order to allow others to accept their own.
- Use mistakes as learning opportunities; explicitly call mistakes learning opportunities.
- Create a playful atmosphere where exploration is allowed.
- Create an atmosphere with humor.
- Explicitly say, “I am not the keeper of all good ideas, I’m here to hear yours.”

Recommendations to OD practitioners

Just as leaders set the stage for psychological safety, so do OD practitioners. The recommendations are to follow the study participants’ lead and keep things light and playful. Recognize each interaction as a co-creation. Accept and heighten all input. Actively listen more intently than ever before. Celebrate failure and recognize that it is the path to innovation. More than anyone else, the OD practitioner should be inviting innovation and creativity and not using embarrassment or rejection. It is imperative that OD practitioners are aware of their language that can shut down the potential collaboration with a client or employee.

Suggestions for Further Research

Because psychological safety is a group construct, a more accurate way to measure its presence in a team would be to observe a team of participants, train them together, and then follow with observations and interviews to see if their psychological safety improved after the training. A larger sample would garner more usable data that could benefit the implementation of IMPT programs in organizations. More research is needed to discover how to best implement IMPT in order ensure psychological safety is present in teams.

Summary of Learnings

The research suggests implementing improv training may foster an environment for psychological safety in teams. The participants of this study could link their IMPT to the way they interacted with their teams. When interviewing the participants for this study the tenets of improv showed up repeatedly. Ensemble and co-creation, listening and communication, ‘yes, and’ and accept and heightening, and authenticity and celebrating failure appear to improve the experience of the participants on their teams.

When speaking about psychological safety, the participants often reflected on teams where it was lacking. The participants' remarked that even when psychologically unsafe experiences were many years prior, they were detrimental. They spoke of steeling themselves to enter work, of innovation being stripped, of racing through meetings just to get them over. One participant said after hearing and reading the definition of psychological safety, that it was all they ever wanted from now on, and if they could, they would have all future employers and teammates sign a contract to ensure it. Psychological safety is imperative.

Interestingly, even as the experience of improv varied (e.g., one participant took one class in college, one participant took a few classes five years ago, some practice improv professionally), all reflected their experience in their team showed up less as repeated exercises, and more as an improv mindset, a way of showing up as themselves, a way of looking at interaction with other people, a way of being.

References

- Agarwal, P., & Farndale, E. (2017). High-performance work systems and creativity implementation: the role of psychological capital and psychological safety. *Human Resource Management Journal*, 27, 3, 440-458.
- Bermant, G. (2013). Working with(out) a net: improvisational theater and enhanced well-being. *Frontiers in Psychology*, 4, 929.
- Boesen, K. P., Herrier, R. N., Apgar, D. A., & Jackowski, R. M. (2009). Improvisational exercises to improve pharmacy students' professional communication skills. *American Journal of Pharmaceutical Education*, 73, 2.
- Brousseau, B. [Telephone interview]. (2019, March 21).
- Cave, D., Pearson, H., Whitehead, P., & Rahim-Jamal, S. (2016). CENTRE: creating psychological safety in groups. *The Clinical Teacher*, 13, 6, 427-431.
- Corsun, D. L., Young, C. A., McManus, A., & Erdem, M. (2006). Overcoming managers' perceptual shortcuts through improvisational theater games. *Journal of Management Development*, 25, 4, 298-315.
- Creswell, J. W. (2018). *Research design qualitative, quantitative, and mixed methods approaches*. Los Angeles, CA: Sage.
- Crossan, M. (1997). Improve to Innovate: Continued business success may depend on enhancing one's ability to be spontaneous and innovative ... key components of the craft of improvisation. *Ivey Business Quarterly*, 62, 1, 36-43.
- Crossan, M. M. (1998). Improvisation in Action. *Organization Science*. 9, 593-599.
- Crossan, M. M., & Hurst, D. K. (2006). Strategic Renewal as Improvisation: Reconciling the Tension Between Exploration and Exploitation. *Ecology and Strategy*, 23, 273-298.
- Delizonna, L. (2019). *High-Performing Teams Need Psychological Safety. Here's How to Create It*. [online] Harvard Business Review. Available at: <https://hbr.org/2017/08/high-performing-teams-need-psychological-safety-heres-how-to-create-it> [Accessed 21 Jul. 2019].
- Duhigg, C. (2016). What Google learned from its quest to build the perfect team. *The New York Times Magazine*, 26.
- Dusya Vera, M. C. (2004). Theatrical Improvisation: Lessons for Organizations. *Organization Studies*, SAGE Publications, 727-749.

- Edmondson, A.C. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44, 2, 350-383.
- Edmondson, A. C. (2002). The Local and Variegated Nature of Learning in Organizations: A Group-Level Perspective. *Organization Science*, 13, 2, 128-146.
- Edmondson, A.C., & Woolley, A. W. (2003) Understanding outcomes of organizational learning interventions. In M. Easterby-Smith and M. Lyles (Eds) *Handbook of Organizational Learning and Knowledge Management*. London: Blackwell
- Edmondson, A. C. (2004). Learning from Mistakes is Easier Said than Done: Group and Organizational Influences on the Detection and Correction of Human Error. *Journal of Applied Behavioral Science*, 40, 1, 66-90.
- Edmondson, A. C. (2019). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth*. Hoboken, NJ: John Wiley & Sons.
- Edmondson, A., & Lei, Z. (2014). Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct. Retrieved July 5, 2019, from <https://www.annualreviews.org/doi/full/10.1146/annurev-orgpsych-031413-091305>
- Fan, S. T. (2013). Applied theatre in corporate training. *Development and Learning in Organizations: An International Journal*, 27, 4, 15-18.
- Farndale, P. A. (2017). High-Performance work systems and creativity implementation: the role of psychological capital and psychological safety. *Human Resource Managment Journal*, 440-458.
- Felsman, P., Seifert, C. M., & Himle, J. A. (2019). The use of improvisational theater training to reduce social anxiety in adolescents. *The Arts in Psychotherapy*, 63, 111-117.
- Ferdin, P. (2000, March 14). Out of the Box, Onto the Stage. *Washington Post*, p. A03. Retrieved from https://www.washingtonpost.com/archive/politics/2000/03/14/out-of-the-box-onto-the-stage/25157e3c-37d3-43a9-ad62-89d43ef0b1d8/?noredirect=on&utm_term=.969d1217ed2e
- Festinger, L. (1950). Informal social communication. *Psychological Review*, 57, 5, 271-82.
- Flucht, Julia. "When The Art Of The Deal Includes Improv Training." NPR, *NPR*, 5 Dec. 2012, www.npr.org/2012/12/05/166484466/it-s-improv-night-at-business-school.
- Gibb Dyer, W. (2013). *Team Building*. San Francisco: Jossey-Bass.

- Gibb, S. (2004). Arts-based training in management development: the use of improvisational theatre. *Journal of Management Development*.
- Halpern, C., Close, D., & Johnson, K. (1994). Truth in comedy: The Manual of Improvisation. Colorado Springs, Colo, Meriwether Pub.
- Hjertø, K. B., & Paulsen, J. M. (2017). Learning outcomes in leadership teams: The multilevel dynamics of mastery goal orientation, team psychological safety, and team potency. *Human Performance*, 30, 1, 38-56.
- Hoffman, A., Utley, B., & Ciccarone, D. (2008). Improving medical student communication skills through improvisational theatre. *Medical Education*, 42, 5, 537-538.
- Huffaker, J. S., & West, E. (2005). Enhancing learning in the business classroom: An adventure with improv theater techniques. *Journal of Management Education*, 29(6), 852-869.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 33(4), 692-724.
- Kirsten, B., & du Preez, R. (2010). Improvisational theatre as team development intervention for climate for work group innovation. *Sa Journal of Industrial Psychology*, 36(1), 1-9.
- Leonard, K. [Telephone interview]. (2019, March 13).
- Leonard, K., & Yorton, T. (2015). Yes, and: How Improvisation Reverses "No, but" Thinking and Improves Creativity and Collaboration--Lessons from the Second City. Harper Business.
- Lewin, K. (1947). Frontiers in Group Dynamics: Concept, Method and Reality in Social Science; Social Equilibria and Social Change. *Human Relations*, 1, 1, 5-41.
- Lewis, C., & Lovatt, P. J. (2013). Breaking away from set patterns of thinking: Improvisation and divergent thinking. *Thinking Skills and Creativity*, 9, 46-58.
- Lickel, B., Hamilton, D. L., & Sherman, S. J. (2001). Elements of a Lay Theory of Groups: Types of Groups, Relational Styles, and the Perception of Group Entitativity. *Personality and Social Psychology Review*, 5, 2, 129-140.
- Mergermarket. (2019, March 20). Is Your Workplace A Joke? A Comedy Club Might Help. *Forbes.com*, Retrieved from <https://www.forbes.com/sites/mergermarket/2019/03/20/is-your-workplace-a-joke-a-comedy-club-might-help/#119f412d58d5>

- Minahan, M. (2014). Working with groups in organizations. In E. Brenda B. Jones and Michael Brazzel, *The NTL Handbook of Organization Development and Change: Principles, Practices, and Perspectives* (pp. 385-406). Wiley.
- Moshavi, D. (2001). "yes and...": Introducing improvisational theatre techniques to the management classroom. *Journal of Management Education*, 25(4), 437-49.
- Paulsen, K. H. (2017). Learning outcomes in leadership teams: The multilevel dynamics of mastery goal orientation, team psychological safety, and team potency. *Human Performance*, 38-56.
- Qin, Z., & Wen, P. (2015). A Cross-Level Examination of the Process Linking Transformational Leadership and Creativity: The Role of Psychological Safety Climate. *Human Performance*, 28, 5, 405-424.
- Ratten, V., & Hodge, J. (2016). So much theory, so little practice: a literature review of workplace improvisation training. *Industrial and Commercial Training*, 48, 3, 149-155.
- Rock, D. (2009). *Your Brain at Work*. New York: HarperCollins Publishers.
- Romanelli, A., Tishby, O., & Moran, G. S. (2017). "Coming home to myself": A qualitative analysis of therapists' experience and interventions following training in theater improvisation skills. *The Arts in Psychotherapy*. 53, 12-22.
- Schachter, S., Nuttin, J., de, M. C., Maucorps, P. H., Osmer, D., Duijker, H., Rommetveit, R., ... Israel, J. (1954). Cross-Cultural Experiments on Threat and Rejection: A Study of the Organization for Comparative Social Research. *Human Relations*, 7, 4, 403-439.
- Schein, E. (1993). How can organizations learn faster? The challenge of entering the green room. *Sloan Management Review*, 85-92.
- Schein, E. (1965). *Personal and organizational change through group methods: the laboratory approach*. New York: Wiley.
- Schwarz, G. M. (2016). Showcasing phenomenon-driven research on organizational change. *Journal of Change Management*, 245-264.
- Scinto, J. (2014, June 27). Why Improv Training Is Great Business Training. Retrieved from <https://www.forbes.com/sites/forbesleadershipforum/2014/06/27/why-improv-training-is-great-business-training/#80c49a06bcbb>
- Senge, P. (2006). *The fifth discipline: The art and practice of the learning organization* (Rev. and updated ed., A currency book). New York: Doubleday/Currency.

- Sorrenti, M., Crossan, M. M., & University of Western Ontario. (1995). Making sense of improvisation: Spontaneous action, strategy, and management behaviour. London, [Ont.: Western Business School, University of Western Ontario.
- Stager, J. L. (2013). Borrowing From Professional Theatre Training to Build Essential Skills in Organization Development Consultants. *Journal of Applied Behavioral Science*, 49, 2, 246-262.
- Staw, B. M., Sandelands, L. E., & Dutton, J. E. (1981). Threat Rigidity Effects in Organizational Behavior: A Multilevel Analysis. *Administrative Science Quarterly*, 26, 4, 501.
- Vera, D., & Crossan, M. (2004). Theatrical Improvisation: Lessons for Organizations. *Organization Studies*, 25, 5, 727-749.
- Vera, D., & Crossan, M. (2005). Improvisation and Innovative Performance in Teams. *Organization Science*, 16, 3, 203-224.
- West, M. (1990). The social psychology of innovation in groups. In M. A. West, & J. L. Farr (Eds.), *Innovation and creativity at work: Psychological and organizational strategies* (pp. 309-333). John Wiley & Sons, Ltd.

Appendix A: Definition of Psychological Safety

DEFINITION OF PSYCHOLOGICAL SAFETY

This definition was presented to each participant while the researcher read it aloud to them:

Psychological safety is not just a warm feeling amongst teammates.
It is also not a “safe space” where nothing challenging is spoken.

Psychological safety is

“a sense of confidence that the team will not embarrass, reject or punish someone for speaking up. This confidence stems from mutual respect and trust among team members”

and

“it describes a team climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves”, where mistakes are caught and learned from, people feel free to innovate, and organizations thrive.

(Edmondson, 1999, 2003, 2004, & 2019).